

CA1
IAS3
-71N01

3 1761 11557905 4




The Bankslanders: Economy and Ecology of a Frontier Trapping Community

Volume 1 — History

By Peter J. Usher

NSRG 71-1





Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

<https://archive.org/details/31761115579054>

THE BANKSLANDERS:
ECONOMY AND ECOLOGY OF A
FRONTIER TRAPPING COMMUNITY
VOLUME 1 – HISTORY

by

PETER J. USHER

The opinions expressed in this report are those of the author and not necessarily those of the Department of Indian Affairs and Northern Development.

Requests for copies of this report should be addressed to the Chief, Northern Science Research Group, Department of Indian Affairs and Northern Development, Ottawa.

Issued under the Authority of the
Honourable Jean Chrétien, P.C., M.P.
Minister of Indian Affairs and Northern Development

Canada

Northern Science Research Group
Department of Indian Affairs
and Northern Development
Ottawa, February, 1971

©
Information Canada
Ottawa, 1970

Cat. No.: R72-6370/1

ABSTRACT

Fur trapping, for generations the chief source of income for native people in northern Canada, has seriously declined in recent years. An outstanding exception is the community of Sachs Harbour, Banks Island, N.W.T., where several thousand arctic fox pelts are harvested annually by fifteen to twenty trappers.

This study analyzes three topics: the cultural ecology of the colonization of Banks Island as a trapping frontier, the economic geography of trapping and hunting there, and the current status and future prospects of the community of Sachs Harbour. Its purposes are to investigate the ecologic, economic and social basis of trapping, to understand trapping as an adaptive strategy in particular historical circumstances, and to analyze it as a viable resource system.

Volume One

The current status of fur trapping and the fur trade of Canada is assessed. An outline of historical developments in the Western Arctic during the whaling and fur trade periods is given in order to place the colonization of Banks Island for arctic fox trapping in context. This is followed by an account and analysis of the process of colonization and adaptation to the 1960s.

The relative success of the various groups of settlers was strongly related to their previous orientation to arctic fox trapping, and hence to their place of origin within the Western Arctic. The development of inland trapping was critical to the successful exploitation of the Island, and despite subsequent centralization of settlement, the trappers have expanded their resource hinterland. This is in contrast to developments in other parts of the north. Through increased productivity and specialized marketing procedures, income levels on Banks Island have kept pace with rising incomes and prices elsewhere in Canada during recent years.

FOREWORD

This report, to be presented in three volumes, is being published as a contribution to our understanding of a specialised human ecological adaptation in the Canadian North. In recent years, the direction of northern research in the social sciences and the thrust of government programs in the north has tended to lead away from the fur and game economy. However, the report which follows describes and analyses patterns of adaptation in one northern community in which trapping, both as a life-style and as an economic pursuit, has allowed a degree of self-sufficiency rare in our North at this time in its history.

It is hoped that the analysis and the assessment presented by Dr. Usher will contribute to an informed understanding of the significance of this sector of the economy.

October 30, 1970.

A.J. Kerr,
Chief,
Northern Science Research Group

ACKNOWLEDGEMENTS

Independent field research in the Arctic, especially for a long period, is a costly undertaking. I am grateful to the Arctic and Alpine Committee of the University of British Columbia, and to the Quebec Department of Education for the necessary financial support. Such research, however, requires not only financial assistance, but the willing co-operation and assistance of many individuals and organizations. I am deeply grateful to many people both in the north and outside who have helped me in this work.

For co-operation in the research stage of this study, I want to thank Mr. John Evans and Mr. Gunther Abrahamson, formerly of the Industrial Division of the Department of Indian Affairs and Northern Development, who gave me the opportunity to work in many parts of the Western Arctic between 1962 and 1965, including my first visit to Banks Island. The Industrial Division also loaned me equipment for field use. I am grateful to the Northern Administration Branch of the Department of Indian Affairs for access to their current files. In the North, Mr. R.M. Hill, Manager of the Inuvik Research Laboratory, and his staff, were particularly helpful. Without their unstinting co-operation in providing field equipment for Banks Island, living and working accommodation in Inuvik, and many other forms of assistance and encouragement, the field expedition would have been quite impossible. I also wish to thank Mr. Syd Hancock, the Inuvik Regional Administrator, and his staff, and the Game Management Service of the Northwest Territories (Fort Smith), particularly Mr. Henry Mann. At Sachs Harbour, Constables Brian Dunn and Stu Wilson were most helpful, as was Father L. Lemer, O.M.I. I am also pleased to acknowledge the co-operation and interest shown by the many ex-Bankslanders in Inuvik, Tuktoyaktuk and elsewhere, who provided much information about their former home. I owe a special debt to the Sachs Harbour people themselves, for their hospitality, friendship and encouragement. Everyone without exception was patient and co-operative with my investigations beyond expectation, but I would particularly like to mention a few who took me in as an ignorant stranger and did their best to make a Bankslander of me: Fred and Agnes Carpenter, Peter Esau, Moses Raddi, David Nasogaluak and Peter and Susie Sidney.

Many people have also assisted me in the course of writing and producing this study. I am grateful to Dr. J.K. Stager, of the University of British Columbia, whose thoughtful guidance throughout has been of great benefit, and to Mr. A.J. Kerr, Chief of the Northern Science Research Group, Department of Indian Affairs and Northern Development, who has given me both time and encouragement to write during the last two years. Several colleagues have very kindly read and commented on certain sections of the work, including Dr. N.S. Novakowski, Dr. A.H. Macpherson, and Mr. Derek G. Smith. I am particularly indebted to Mr. Smith, whose research and observations on social structure and process in the Mackenzie Delta (contemporaneous to my own study) have been a constant stimulus to me. Dr. A.R. Sen gave helpful guidance with the statistical procedures used in Volume Two, Chapter One, and Mr. Alan Netherton wrote the computer programme for that analysis. I am grateful to Mr. Bob Norgren for drafting the maps and diagrams, and to Mrs. Anne Mackenzie and Mrs. Ida Lamb for typing the manuscript.

GENERAL TABLE OF CONTENTS FOR THE THREE VOLUMES

Volume One – HISTORY

Introduction

Chapter One – An Economic and Social Appraisal of Modern Fur Trapping

Chapter Two – The Development of the Fur Trade in the Western Arctic:
Historical Antecedents to the Colonization of Banks Island.

Chapter Three – The Colonization of Banks Island: 1928 – 1967

Volume Two – ECONOMY AND ECOLOGY

Chapter One – Fox Trapping

Chapter Two – Hunting and the Annual Cycle of Activity

Chapter Three – Investment, Income and Expenditure

Volume Three – THE COMMUNITY

Chapter One – Sachs Harbour

Chapter Two – Oil and Trapping: the Role of Government

Chapter Three – Conclusions

VOLUME ONE

TABLE OF CONTENTS

	Page
FOREWORD	v
ACKNOWLEDGEMENTS	vii
INTRODUCTION	1
Theoretical approaches and previous research	2
Research methods and sources	5
Location of the study area	6
CHAPTER ONE – AN ECONOMIC AND SOCIAL APPRAISAL OF MODERN FUR TRAPPING	9
Canadian fur production – national and international perspectives	9
The status of white fox	12
The fur industry	15
The fur trade	16
The northern trapper today	17
Credit, marketing, organization and government policy	18
The Bankslanders as trappers	21
CHAPTER TWO – THE DEVELOPMENT OF THE FUR TRADE IN THE WESTERN ARCTIC: HISTORICAL ANTECEDENTS TO THE COLONIZATION OF BANKS ISLAND	23
The impact of the whalers	23
Population decline and regrouping	25
The transition from whaling to the white fox trade	26
The fur trade boom of the 1920s	27
Regulation of the fur trade	28
Overharvesting and its consequences	30
The new people of the Baillie Island district	32
The development of a trapping elite	33
The decline of the fur trade	34
Banks Island – prelude to colonization: 1900-1928	36
CHAPTER THREE – THE COLONIZATION OF BANKS ISLAND: 1928-1967	41
The Banks Island environment	42
Early life on Banks Island	44
The general sequence of settlement, 1928-67	51
The first phase, 1928-48: Banksland as the culmination of the regional way of life	52
The second phase, 1951-67: Banksland as the antithesis of the regional way of life	55
Summary and analysis of change	58

APPENDIX A – HISTORICAL STATISTICS	95
APPENDIX B – ABORIGINAL OCCUPANCY OF BANKS ISLAND	105
BIBLIOGRAPHY	111

LIST OF TABLES

Table	Page
1.1 Average annual value of the Canadian wild fur harvest	11
1.2 White fox production, Canada	11
3.1 Degree days below 65° F. at selected locations	42
3.2 Climate data, Sachs Harbour, N.W.T.	43
3.3 Financing of the "Banksland Project"	57
3.4 Ethnic origin, birthplace and place of origin of all trappers wintering on Banks Island	59
3.5 In-migration/out-migration, Banks Island, by place or origin	61
3.6 Length of residence on Banks Island by place of origin	61
3.7 Family size and proportion of full-time trappers to population, Banks Island	65
3.8 Camp size by number of trappers wintering at each site	68
3.9 Camp use by number of winters each site occupied	69
3.10 Number and size of trapping camps, by historical period	70
3.11 Extent of trapping grounds	76
3.12 Development of inland trapping	76
3.13 Relationship of trapper population to size of trapping grounds	76
3.14 Foxes exported directly to auction houses	85
3.15 White fox production, Banks Island, by historical period	88
3.16 Earnings from white fox, Banks Island, by historical period and phase ..	88
A.1 White fox pelt production, Canada, cumulative by region	97
A.2 Legal open seasons for white fox effective on Banks Island	98
A.3 Length of residence on Banks Island, by place of origin	99
A.4 Number of full-time trappers wintering on Banks Island, by year and by campsite	100
A.5 White fox pelt production, Banks Island	101
A.6 Earnings from white fox, Banks Island.	102
A.7 Indices for consumer prices (Canada) and pelt values (N.W.T.)	103

LIST OF FIGURES

Figure	Page
0.1 Western Canada location map	7
1.1 The price versus the supply of white fox, Canada	14
2.1 Western Arctic reference map	24
3.1 Immigration and emigration, Banks Island, 1928-67	64
3.2 Total number of trappers wintering at each camp	71
3.3 Trapline routes and winter camps, 1928-1936	77
3.4 Trapline routes and winter camps, 1937-1941	77
3.5 Trapline routes and winter camps, 1942-1948	77
3.6 Trapline routes and winter camps, 1951-1955	79
3.7 Trapline routes and winter camps, 1955-1961	79
3.8 Trapline routes and winter camps, 1961-1967	79
3.9 Trapping areas, 1928-67	81
3.10 White fox prices	87
3.11 White fox production, Banks Island	89
3.12 Earnings from white fox, Banks Island	90
3.13 N.W.T. fur price indices compared with Canadian food price index ...	92

INTRODUCTION

For most northerners in Canada, fur trapping has for generations been the main source of cash and trade goods. Recently this traditional occupation has declined in its ability to support the people engaged in it. Few other economic opportunities have arisen to take the place of trapping, unfortunately, and seldom have trapping communities been afforded an easy transition into a new life. More often, poverty, degradation and bewilderment are evident in the village of the northern bush and tundra. The decline of the fur trade and of fur trapping seems to have been pervasive. No single cause presents itself, nor does a single remedy. Biological, economic and social factors have all played a role; some have been more important in one place, others in the next, but everywhere the reasons are many and complex. Some factors are essentially local or regional, others involve the very structure of Canadian society or the world economy.

Yet there are exceptions to this rather dismal picture of trapping and of modern life in northern native communities. The most remarkable of these is the case of Banks Island, Northwest Territories, where a small group of trappers continue to lead a productive, satisfying and self-sufficient life. There the Eskimos colonized new trapping grounds, and developed trapping practices to an unprecedented degree of modernity and productivity. Since 1929 the Island has become the most productive white fox trapping area in the New World.

Sachs Harbour is now the outstanding example of a successful trapping community in northern North America, and perhaps the world; hence its choice as location of this study. Trapping is still the full-time occupation of virtually every active male, and per capita income from trapping is higher than in any other settlement in the Arctic or Subarctic. Eighty-seven per cent of cash income at Sachs Harbour was derived from trapping during the years 1963-67, and the average income of full-time trappers from furs was \$6,296. The opportunity therefore exists to study a trapping economy in almost ideal form, since alternative economic opportunities are virtually absent.

This study seeks to analyze three topics: the cultural ecology of the colonization of Banks Island as a trapping frontier, the economic geography of trapping and hunting there, and the current status and future prospects of the community of Sachs Harbour. Our purpose is to investigate the ecologic, economic and social basis of trapping, and to analyze trapping as a viable, coherent *resource system*¹. Through the example of a successful trapping community, we may learn how northern people can derive maximum benefit from their traditional resource base. We will also demonstrate the strengths and weaknesses of a community so dependent on the trapping life, and the problems it faces in dealing with encroachment and change from the "outside world".

The report will investigate the cultural and socio-economic background of the trappers, the history of settlement on the Island, the ecological foundation for the prosecution of trapping there, and the technology and economic system through

¹The concept of resource system was developed by Walter Firey and is explained in the following section.

which the production and marketing of fur is effected. The changing nature and areal extent of the occupation and exploitation of the Island will be examined, and in particular, operational models of trapping and hunting will be constructed which should have broad applicability in the north. We seek to discover if this successful adaptation to trapping was merely an historical accident or whether the Bankslanders' experience offers hope to other people in other places. A thorough knowledge of the Eskimo trapper at Sachs Harbour, despite his uniqueness, must surely extend our understanding of the Eskimo trapper at Povungnituk or Baker Lake, the Indian trapper at Mistassini Post or Fort Yukon, and the Metis trapper at Buffalo Narrows or Lac la Biche.

This report is divided into three volumes, treating each of the main themes described. The first volume includes a general analysis of modern fur trapping in Canada, as well as an history of the Western Arctic fur trade and the colonization of Banks Island. The second discusses the ecology and harvesting of the chief economic species on Banks Island (particularly the arctic fox) and provides an economic analysis of the trapping and hunting system. The final volume describes the current status of the community of Sachs Harbour, the impact of government programmes and oil exploration on it, and outlines several policy options and their implications for both the Federal Government and the Bankslanders.

Theoretical approaches and previous research

The resource system

The components of a resource system lie within three distinct fields of knowledge: biological ecology, economics, and sociology-anthropology. Firey suggests that the nature of resource systems involves not only a tripartite division of knowledge, but also three distinct approaches to resource use which are not necessarily consistent. These he terms the ecological, ethnological, and economic. There are, in other words, sets of resource complexes which may or may not be physically and biologically possible, socially and culturally adoptable (i.e. congruent with social goals and values), and economically gainful, in any particular environment, society and economy. But

“...no one of these approaches can, by itself, provide an adequate rational for what resource planners are doing or are able to do. There is some thing heroic but futile in the ecological criterion of permanence; there is something aesthetic but anachronistic in the ethnological criterion of adoptability; and there is something rational but precarious in the economic criterion of efficiency.” (1960:251).

Only a theory which integrates all three aspects of resource systems can provide understanding and action which is not only “rational” but workable and acceptable:

“...the three corresponding optima which are defined by these theories [ecology, ethnology and economics], though they can never be simultaneously achieved in real life, nevertheless serve as ideal standards from which a resource system departs at the cost of predictable consequences.” (1960:252).

This type of analysis is exemplified in Cooley's study of the Alaska salmon industry (1963), where conflict and misunderstanding between ecological, economic, social and political considerations have produced such an unhappy history of resource use.

In October, 1970, oil exploration crews commenced seismic work on Banks Island, and a conflict of interest has arisen between them and the local trappers. This conflict over resource use and development will be analyzed in the final volume.

Human ecology in Arctic studies

The analysis of village ecologies and economies has been of enduring interest: the processes and mechanics of small groups of people making a living from the scattered resources of large areas (viz. Lantis, 1954). Frequently such studies have been prompted by the onset of distress, and thus involve programmes and recommendations for improvement, as well as description and analysis of the existing situation. The classic studies by Mikkelsen and Sveistrup of East Greenland (1944), Shimkin of Fort Yukon (1955), and Findlay of Ungava Bay (1955) are early examples of this approach.

More recently, ecologic-economic investigations have been conducted as integral parts of regional development programmes or planned ecological change. Examples are the work of the human geography team, and others, on the Project Chariot investigations in northwest Alaska (Foote and Williamson, 1966; Saario and Kessel, 1966), and particularly the Area Economic Survey Program of the Department of Indian Affairs and Northern Development. In the latter case almost twenty reports were produced for the various regions of the N.W.T. and northern Quebec over a ten year period.¹ Similar work is now being done in Newfoundland and Labrador under the impetus of the outport resettlement program.²

These studies have been characterized by meticulous observation and collection of data with scrupulous attention to detail, over a sustained period. They have sought to establish the resource potential and natural constraints of the area, the distribution and demographic structure of the population and its social and cultural setting, inputs and outputs in the harvesting and converting of local resources, and the economic and financial structures through which this is effected.

The strength of these works has been in the provision of accurate description and a wealth of reference data for a large number of communities. Moreover the data have been presented in reasonably uniform fashion, allowing comparison from one area to another. Their weakness, (due mainly to their *ad hoc* and practical nature), lies in the absence of a clear and thoughtful methodological framework, and a paucity of analysis and theoretical principles derived from the research. They have nonetheless developed significant advances in the methodology of community ecological studies, which will be referred to periodically in the following chapters. One of the purposes of this report is to suggest, by example, an appropriate structure

¹Foote (1967a) provides a review and bibliography of these reports to the end of 1966.

²See for example the series "Newfoundland Social and Economic Studies" of the Institute of Social and Economic Research, Memorial University of Newfoundland.

and methodology for such studies, as well as to derive some general principles which might be utilized or tested in future work. In particular accurate measurement of economic and biological phenomena will be stressed, in addition to the descriptive accounts of the local ecology and economy, although the latter are certainly important. Only through such mensuration and through the examination of interrelations between various phenomena, can we proceed from description to explanation, simulation and prediction.

Studies of trapping and hunting

Although numerous studies have been made of trapping and hunting societies, very few have focussed primarily on the ecology and economy of trapping and hunting, especially under modern conditions.

Fuchs (1957) has made the most comprehensive analysis of the fur industry as a whole, although his chapter on raw fur production is written from a very broad perspective, and serves chiefly to outline its position in the industry as a whole. Loughrey (1961) has made a briefer analysis, similar to Fuchs', of the Canadian fur industry.

Within Canada, there have been a few more detailed studies of trapping and fur production on a regional basis. Quick's work on the Fort Nelson area of B.C. (1950) is largely descriptive although some data are given on the size and productivity of the traplines. A study by Kaminsky of Manitoba's fur resources (1947), contains some useful economic analysis of the factors affecting fur prices and the supply of trappers, but does not discuss the problems of trapline efficiency. Buckley (1962) has provided an excellent analysis of fur production, trapper income, and problems of marketing and credit in Northern Saskatchewan. Dunning, in his study of the Pekangikum Indians in Northwestern Ontario (1959a), has probably given more complete information on the trapping economy than any other anthropologist, including a fairly detailed accounting of the trappers' maintenance and depreciation costs of their outfits.

A biological study of experimental traplines in northeastern Ontario by de Vos et al (1959) provides some data on productivity per unit of effort and per unit of area, and Tanner's geography of Labrador (1944) contains some interesting descriptive material on white trappers, with some data on individual traplines and incomes.

Of trapping in the N.W.T., the best overall summary was done by the Robinsons in 1946. A more specific analysis of the problems of the industry in one area was conducted by Black (1961). The Area Economic Surveys tended to concentrate on alternative resources to supplant the faltering fur economy, and thus rarely emphasized trapping. Exceptions are those reports by Brack (1962, 1963) and Usher (1966).

In other northern regions, Chesemore (1964?) has examined some aspects of trapline operations around Point Barrow, Alaska. There are also a few Soviet articles which provide accounts of trapping methods and productivity in the Russian north. Of some interest is a methodology developed by Danilooff (1959) for evaluating

the productivity of trapping areas, although this work is of limited relevance to white fox trapping, which is conducted on a line rather than a network basis.

Yet virtually all of this literature is descriptive. In some cases quantitative data are given, which are useful for comparison. In none of these works is there a comprehensive attempt to analyze trapline efficiency and productivity. Nowhere has there been a systematic assessment of inputs and outputs in trapping, nor have any of these authors tried to determine the full cost in time or money to the trapper of harvesting furs on a per pelt and per species basis. Nor has the relationship between trapping and certain ancillary activities such as hunting been clearly specified. The analyses presented in Volume Two, Chapters One and Three are therefore entirely new.

Ecological studies of hunting are in a more advanced state. D.C. Foote was a leader in this field and his attempts to quantify hunting inputs and outputs in terms of energy (1965), and his studies of efficiency and productivity in seal hunting (1967b), are outstanding examples of his work. The Area Economic Survey program also contributed to this field.¹ Yet several of the economic aspects of hunting have not been analysed, particularly the input costs per unit of production. Chapter Two and parts of Chapter Three of Volume Two are devoted to a rigorous analysis of the hunting system at Sachs Harbour, and should extend the understanding of hunting activity significantly beyond the scope of the existing literature.²

Research methods and sources

This study is based on fourteen months of field research in the Western Arctic, covering the periods May-June 1965, July 1966-May 1967, and July 1967. About twelve months of this time were spent in the village of Sachs Harbour on Banks Island. In 1965 I conducted an economic survey of Banks Island under contract with the Industrial Division of the Department of Indian Affairs and Northern Development (then the Department of Northern Affairs and National Resources). A report on this work was published the following spring (Usher, 1966). The remainder of the field work was conducted independently. The fact that field investigations extended over a period of twenty-seven months made possible the collection of detailed information, and particularly quantitative data relating to the annual economic cycle and trapping and hunting inputs and outputs, for three successive years (1 July, 1964-30 June 1967). The analysis thus depends not on a single year's observations, but three years', the range of whose characteristics is considered more representative of the total spectrum of possibilities.

Most of the material in this report was submitted to the University of British Columbia as a doctoral thesis in geography in March 1970. The present three volumes are largely similar to that thesis in content and organization, except that some theoretical considerations in the introduction have been omitted, and new material is presented in Chapter Two of Volume Three on the current resource use

¹See especially Brack 1963; Abrahamson et al, 1964; Usher 1965, 1966; Haller, 1967 and Anders, 1967.

²Attempts by anthropologists to obtain quantitative data on hunting activities include those of Knight in the Rupert House area of Quebec (1968), and Lee for the Bushmen in Africa (1968).

conflict. Material for that chapter has been obtained through continuing contact with the Bankslanders and other knowledgeable individuals, and especially through brief visits to Sachs Harbour in July 1969 and September 1970. I have also obtained fur and game records continuously since 1967. Where necessary, footnotes or appendices to other chapters have been added to provide updated information.

The main research method was participant observation, although most quantitative data were obtained through semi-formal interviews. Two months were spent in the Mackenzie Delta and Tuktoyaktuk where I examined Federal Government documents concerning Banks Island, and interviewed many former Banks Island residents. Information was also gained through interviews or correspondence with many other people such as former traders and government officials, both in northern and southern Canada, familiar with Banks Island or the history of the Western Arctic.

Library and archival research was necessary in addition to the field research. Most of this was done in Ottawa: in various government libraries in that city, in the Public Archives of Canada, and in the file registry of the Northern Administration Branch of the Department of Indian Affairs and Northern Development. The records of the Game Management Service in Fort Smith, N.W.T., were also an important source of fur and game statistics.

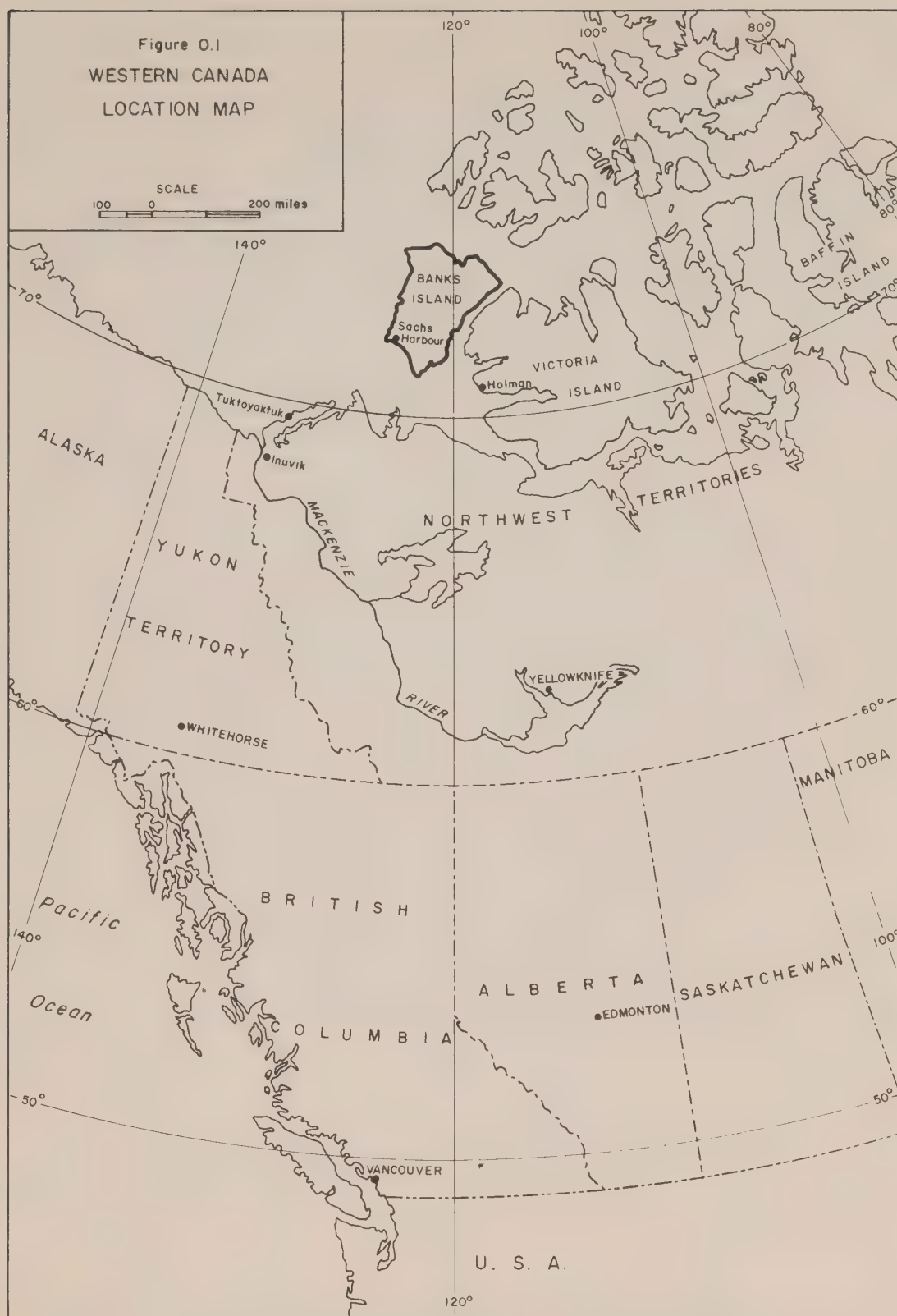
The secondary sources on Banks Island, and on the modern trapping economy, are limited both in number and scope. The history of the Western Arctic, and of Banksland in particular, recounted in Chapters Two and Three, is based largely on documentary sources and personal interviews. The chief documentary sources, and their abbreviations for reference, are as follows. Files presently held by the Northern Administration Branch of the Department of Indian Affairs and Northern Development are cited as IA&ND/NAB, followed by the file number and if necessary, the volume number. Files formerly held by that branch (or its predecessors), now in the Public Archives of Canada, are cited as PAC,NA&NR/NAB, also followed by the file number and volume. Correspondence in the Stefansson Collection at Dartmouth College, New Hampshire, is cited as NhDStef, Correspondence, with the appropriate details. Information obtained by personal correspondence is cited as such, but interview information is normally not cited. Volumes Two and Three are based chiefly on data obtained through participant observation and interviews.

Location of the study area

Banks Island, or "Banksland", as it is locally referred to, is the most westerly of the Canadian Arctic Islands, situated between latitude 71° and 74° north, and longitude 115° and 125° west. It lies athwart the western entrance to the Northwest Passage, for each of the three routes is within sight of the Island. With an area of 27,383 square miles, it is the fourth largest of the Arctic Islands, after Baffin, Ellesmere and Victoria. From this Island, which has about the same area as New Brunswick and twice that of Vancouver Island, is harvested \$100,000 to \$200,000 worth of fur and game resources annually. These resources (no others have been exploited on the Island) are the basis of livelihood for about 100 Eskimo people. All

Figure O.1
WESTERN CANADA
LOCATION MAP

SCALE
100 0 200 miles



are resident in one settlement at the southwest corner of the Island: Sachs Harbour ($71^{\circ}59'$ north, $125^{\circ}15'$ west), almost 1,600 miles north of Vancouver, B.C., and about 1,250 miles from the North Pole. Such paucity of settlement is typical of this part of the world. On neighbouring Victoria Island there are but two communities, one of which, Holman Island, 190 air miles distant, is the closest inhabited point to Sachs Harbour. Two other villages, both on the mainland, are of significance in their relation to Sachs Harbour. One is Tuktoyaktuk, 255 air miles away, whence many of the Bankslanders originated, and the other is Inuvik, 320 miles distant. The latter, located in the Mackenzie Delta, or simply "The Delta" as it is locally known, is the administrative and service centre for the entire Western Arctic.

CHAPTER ONE

AN ECONOMIC AND SOCIAL APPRAISAL OF MODERN FUR TRAPPING

The Banks Island community, though geographically isolated and relatively inaccessible, cannot be understood without reference to the social and economic realities of the nation, and indeed the world. No community is a closed system, even in the Arctic; least of all Sachs Harbour which is totally dependent on outside markets for its produce and on outside sources for the means of production and of life. It is therefore necessary to survey the status of the fur industry and trade in general, and the place of white fox, and particularly Banks Island white fox, in it. It will also be useful to identify some of the social and economic problems of trapping and trappers in Canada today, in order to place the Banksland experience in context.

Canadian fur production – national and international perspectives

Furs are the oldest and historically the most important of Canada's resources. Until little more than a century ago, they were the foundation of the colonial economy, and until very recently were the economic mainstay of the vast regions of bush and tundra north of our agricultural fringes. With the transformation of Canada's economic life in the last century – the world wide demand for our minerals, wood and wheat, and our coming of age as an urban industrial nation – the fur industry has been left far behind. Yet despite the relative decline of fur as a national resource, the value of wild fur production in recent decades has been greater than it ever was in the days of James McGill and Alexander Mackenzie, and Canada continues to rank among the leading fur producing nations of the world.

World fur production is not easily ascertained, since many countries do not keep complete and accurate statistics. The following discussion is thus necessarily somewhat general, and cannot always be supported by specific data.¹

Canadian production of raw furs has amounted to \$35-40 million annually in recent years. This is exceeded only by the U.S.A. (over \$100 million) and the U.S.S.R. (probably about \$100 million). Ranch furs (primarily mink) however, are accounting for an increasing proportion of production in all countries. In Canada they have risen from about five per cent of the total in the early 1920s to almost two-thirds in recent years.

Of wild fur production, it can only be said that Canada, the U.S.A. and the U.S.S.R. are the three leading producers. It seems likely that the Soviets produce the greatest amount of wild fur by value, but this cannot be substantiated. American production is generally higher than Canada's but consists largely of the cheaper furs

¹I am indebted to Mr. A. Stewart, Chief, Fur Section, Department of Agriculture, for some of the information presented in this and the following sections. Canadian production figures are derived from D.B.S. Annual Reports on fur production.

such as muskrat and raccoon.¹ Canadian wild fur production has averaged almost \$13 million in value over the last decade, although it has reached \$30 million in earlier years. Both the Canadian and Russian harvests include the most desirable species, and are renown for their high quality.

The broad trend in world fur prices during the twentieth century has been a rapid rise during the first three decades, a decline during the Depression, a resurgence during World War Two, another subsequent decline, and a moderate recovery and levelling off since then. Prices for most species are now at about the 1920s level, although some are lower. Thus in terms of real dollars, the fur industry has everywhere suffered a general decline in prices over the last forty years.

The trend in fur production have been somewhat different from those of prices. Pelt production of most species probably reached unprecedented levels in the 1920s. The harvests of most furs declined during the Depression, although for such species as white fox, lynx and squirrel they did not. Again, while production generally increased during the war, there was a contrary trend in white fox, lynx and marten. Since then, there has been considerable variation. Beaver, otter and marten are now being harvested in record numbers. Mink and lynx have remained relatively static, while white fox, muskrat and squirrel have declined, the last two rather sharply.

The production for individual years is affected by natural population cycles among fur bearers, although since the timing of these cycles is seldom simultaneous over the entire country, their effect is somewhat damped in the national production figures. The general trends over the last 50 years are not due to normal population fluctuations, but rather to changing environmental conditions, especially in the more southerly regions; overharvesting, among certain species at least and in recent decades, to social and economic changes affecting the trappers.

The composition of the Canadian wild fur harvest is shown in Table 1.1. During the last decade beaver has been the most important fur, amounting to almost 40 per cent of the total by value. Mink and muskrat have accounted for almost 15 per cent each, and squirrel ranks fourth at about five per cent. Lynx, white fox and otter account for between three and four per cent each of Canada's wild fur production. Other species are of less significance, although for a few years in the mid 1960s seals added over \$1 million annually to the fur harvest (split about evenly between ringed and harp seals).

Most wild furs are obtained north of the settled agricultural area of the country. Ontario is the leading producer at almost \$3 million annually, followed by Quebec, Alberta, and in close order, Manitoba, Saskatchewan, and the N.W.T. Territorial production is normally about \$1 million annually, or slightly less than one-tenth the national total. Ranch raised fur, on the other hand, is associated with the agricultural areas of Canada. There are no fur farms in the N.W.T. or Yukon, and few if any in the northern parts of the provinces.

¹Estimates of U.S. annual production range from \$11.3 million by Williams (1966, for the years 1960-62, not including Alaska fur seal) to a maximum of \$100 million by Fuchs (1957).

TABLE 1.1

Average annual value of the Canadian wild fur harvest,
(approximate), 1958-68

Species	Value (\$)	Proportion of total harvest (per cent)
Beaver	5,043,300	39.5
Mink	1,861,700	14.6
Muskrat	1,787,300	14.0
Squirrel	661,600	5.2
Lynx	479,700	3.8
White fox	460,900	3.6
Otter	411,200	3.2
Marten	320,200	2.5
Ermine	175,800	1.4
Rabbit	121,500	1.0
Fox (other)	122,700	1.0
Other furs ^a	1,325,700	10.2
Total ^a	12,771,600	100.0

^aIncludes seals since 1964-65.

Source: Canada, D.B.S., Fur Production, 1958-59 — 1967-68

TABLE 1.2

White fox production, Canada, 1919-68

Decade	Mean annual number pelts	Mean annual value (\$)	Proportion of Canadian wild fur production by value (per cent)
1919-29	37,506	1,474,000	10.2 ^a
1929-39	52,030	948,700	11.0
1939-49	44,992	896,200	4.6
1949-59	40,332	488,100	3.7
1959-68	30,044	453,200	3.5
1919-68	41,205	863,300	6.2 ^b

^a1920-29 only

^b1920-68 only

Source: Canada, D.B.S., Fur Production, 1919-20 — 1967-68.

The status of white fox

White fox was particularly fashionable before World War Two, and was one of the leading Canadian wild furs by value, ranking second in some years. Production rose sharply in the early 1920s, and indeed the 1922-23 harvest of 77,135 pelts has only once been surpassed.¹ Numerous consistently good crops during the 1930s however, caused mean annual production during that decade to reach 52,000 pelts (Table 1.2), an increase of about one third over the 1920s. Since then production has exhibited a long term decline, although fluctuations from one year to another are very marked. During the 1960s the average crop has amounted to 30,000 pelts, but in some years it has been as low as 10,000-12,000. Until 1939 white fox usually represented over ten per cent of Canadian wild fur production. In recent years it has averaged 3.5 per cent of the wild crop by value, and in terms of total Canadian production, including ranch furs, it has seldom exceeded two per cent.

Despite this decline Canada remains, along with the U.S.S.R., the world's major producer of white fox pelts. The Soviet North has steadily yielded approximately 75,000-100,000 pelts per annum (Geller and Skrobov, 1967). This suggests a longterm average production of about double that of Canada's. Other northern lands are insignificant producers. Alaskan production has only twice ever exceeded 10,000 pelts (in the 1920s) and in recent years has been about 2,000-3,000 pelts or less (Buckley, 1954:351 and *Alaska Review*, 1966:4). In Greenland, where production has probably never exceeded 10,000 pelts (Braestrup, 1941:86-91) the fox take ranged from 2,284 to 5,430 between 1954 and 1965² (personal correspondence, G. Martens, Ministeriet for Grønland, Copenhagen, 4 January 1968). In Scandinavia proper, white foxes have been completely protected for a number of years (personal correspondence, P. Raudas, Embassy of Finland, Ottawa, 24 January 1968; B. Thelander, Svenska Jagareförbundet, Stockholm, 9 January 1968; Y. Hagen, Statens Viltundersøkelser, Ås, Norway, 3 January, 1968). In the Norwegian possessions (Jan Mayen and Svalbard), data available for the years 1906-27 and 1945-62 indicate that rarely were more than 500 blue and white foxes taken in any year (Norges Svalbard Og Ishaus-Undersøkelser, 1929³ and personal correspondence, M. Norderhaug, Norsk Polarinstitutt, Oslo, 12 January, 1968). Jan Mayen has recently been closed to trapping. In sum it appears that in recent years, world white fox production has averaged about 120,000 pelts annually, of which about two-thirds come from the U.S.S.R., one-quarter from Canada, and a small proportion from Alaska, Greenland and Svalbard. Both the total production and the relative national shares of it fluctuate considerably from year to year.

The major consumers of white fox (as of most furs), are the United States and Western Europe. Until 1952 London was the leading distribution centre for raw white fox pelts. The Hudson's Bay Company⁴ was the chief purchaser of Canadian

¹In 1954-55, when a record 81,783 pelts were collected.

²Unlike most parts of the Arctic, where the blue phase occurs in about one per cent of arctic foxes, the majority of the harvest in Greenland consists of blues. Both phases are included in the figures given here.

³I am indebted to Miss Sheila MacBain for translating relevant sections of this document.

⁴Also known as "The Bay" and sometimes referred to as such in this study.

foxes, and almost all of these were auctioned in London. Much of the Soviet production was auctioned there as well, since "The Bay" also acted as sales agent for Soviet furs in the West. In 1952 however, the United States placed an embargo on the entry of Soviet white fox furs. The Hudson's Bay Company then ceased sending Canadian foxes to London, and auctioned them in Montreal instead. Currently, Canada is almost the exclusive supplier of white fox to the United States. Trade Statistics for the years 1964-68 indicate that virtually all Canadian production is exported, and of this almost 98 per cent has gone to the U.S. (Canada, D.B.S., *Trade of Canada*, 1964-68). The European market is supplied almost entirely by the U.S.S.R. As a result, two separate and virtually independent markets exist for white fox, of which the American tends to bring the best prices, since the supply is considerably smaller. Since the entire Canadian white fox production is assured a market in the U.S., the needs of Canadian fur garment manufacturers are sometimes met by the importation of Soviet foxes, as there is no embargo in Canada.

Canadian white fox trappers thus do not compete with their Soviet counterparts, and so long as the American embargo continues, and the American market can absorb the Canadian harvest, they will not do so in future.¹ Figure 1.1 indicates that prices paid to producers for white foxes in Canada are quite strongly related to total annual production. The response is fairly direct; in years of scarcity the price increases, often quite sharply, whereas good yields, especially for two or three years in succession, drive prices downwards. In the long run, fox prices are probably tied to the general trends in all fur prices, but much of the short term variation appears to be explained by the laws of supply and demand.² However, since foxes are used largely for trim in low and medium priced garments, the trappers may ultimately have more to fear from undersupplying than oversupplying the market, because a chronic shortage might cause manufacturers to turn to another fur altogether. While there are no rigorous means of forecasting demand and prices for furs, it would appear that the current nature of the demand for white fox assures a relatively stable price for it over the next few years, other things being equal.

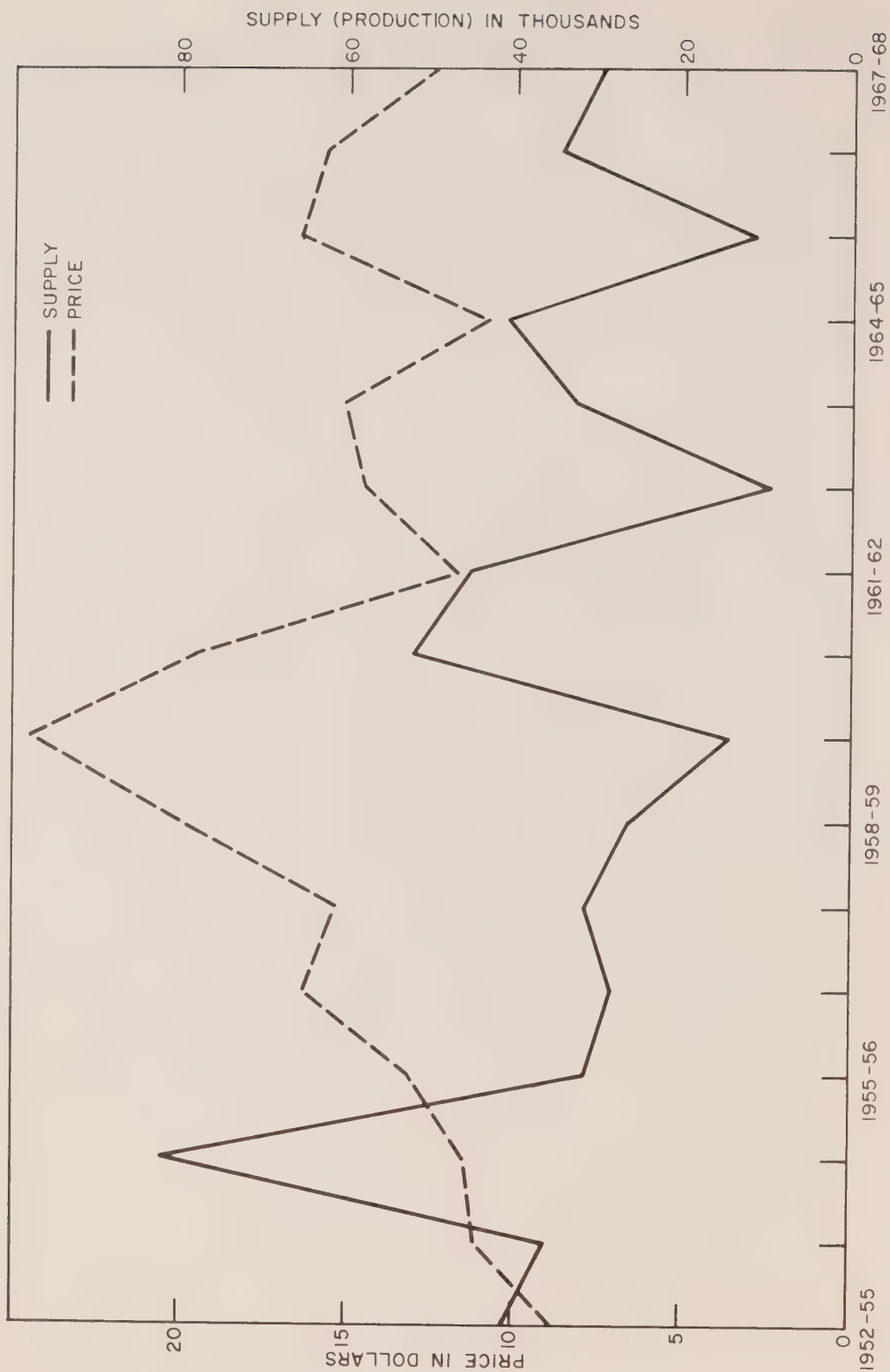
The bulk of Canadian white fox production comes from the N.W.T. (83 per cent in the last 20 years), with most of the remainder coming from Arctic Quebec. There are probably not more than 1,000 individuals in the N.W.T. who derive income from the trapping of white fox, and virtually all of these are Eskimos.³ The most productive areas traditionally have included Banks, Victoria and King William Islands, the northeastern Mackenzie District, and most of the Keewatin District east through Southampton Island. Particularly large collections have been obtained from such places as Sachs Harbour, Repulse, Cambridge Bay, King William Island,

¹Nor do they compete directly with fur farmers, since white foxes have never been successfully ranched.

²The tariff has always varied widely across the Arctic. In the competitive situation among buyers in and around the Mackenzie Delta, trappers have generally received good prices. In isolated and inaccessible areas such as the Central Arctic, where the Hudson's Bay Company was in complete control, prices paid have been considerably below the D.B.S. average figures.

³Prior to World War Two, fox trapping was the full-time winter occupation of virtually all adult male Eskimos, who in those years numbered somewhat over 1,000. A few white trappers were also involved, chiefly in the southern Keewatin, the barren grounds east of Fort Reliance, and along the Arctic Coast west of Bathurst Inlet.

Figure 1.1
THE PRICE VERSUS THE SUPPLY OF WHITE FOX, CANADA, 1952 - 68



Eskimo Point and Coral Harbour. Sachs Harbour trappers, despite their small number, have consistently made an important contribution to the Canadian harvest, and their share appears to be increasing. From the late 1930s to the early 1960s they provided roughly five per cent of the Canadian total, and in some years over ten per cent. In three of the last six years, over one-quarter of the entire Canadian white fox harvest has come from Banks Island. Table A.1 gives the Canadian harvest on a cumulative basis by regions since 1928. The eminence of Banks Island within the Western Arctic region is evident, especially after 1936.

The fur industry

The growth of the fur industry in the last 20 years has been slow, and it has not shared in the general postwar economic expansion (Fuchs, 1957:7 and Loughrey, 1961:848). There has been a clear, longterm relative decline in the demand for fur products, which has in turn led to a stagnation in the value of raw furs.

The fur industry has been suffering from increased competition from several sources. As a luxury and status item, fur must now compete for the consumer's disposable income with a multitude of other luxury items whose availability and quality have increased stupendously since the war. As a functional item of clothing, furs suffer increased competition from synthetic pile and cloth coats (see Fuchs 1957, especially Chapter 3). Within the fur industry, the wild fur producer no longer has the field to himself. Ranch furs have steadily increased their share of the market and although only a few species have been successfully farmed, ranch furs have probably tended to replace wild furs of all species due to stability of supply and uniformity of quality.

Most of Canada's furs are exported, either by trading companies themselves, or by foreign buyers purchasing at periodic raw fur auctions held in Montreal, Winnipeg, Edmonton, Vancouver and other cities. Thus even the most isolated trapper finds his income dependent to some degree on the decisions of the fashion makers in Paris, London and New York; the dyers and designers who will create demand for one or another type of fur. This combination of increased competition in the luxury market and the manipulative nature of the fur industry itself led Fuchs to characterize the industry as suffering from both long term decline and short term instability (1957:7).

Another important characteristic of the fur industry is its atomistic nature, and the intense competition involved in most sectors of it. As in the garment industry, the multitude of manufacturing establishments are typically small and involve little capital investment. Because of this, there has been an almost complete indifference to the raw fur supply (Fuchs, 1957:16). No sector of the industry feels responsible for ensuring a continued supply — there is no organized concern for either the conservation of fur bearers or the welfare of the trappers (a notable exception being the Hudson's Bay Company). Most such action has come only in recent years, from government wildlife and welfare agencies.

The fur trade

Two rather different fur trades have existed in Canada. The earliest was the Indian trade of the Subarctic forest, based on beaver, mink, marten, muskrat and lynx. The second was the Eskimo trade of the Arctic tundra, based almost entirely on the white fox. The Indian trade dates from the seventeenth century, and reached its full geographic extent by the mid nineteenth century (Stager, 1962). Although the introduction of the fur trade among the Indians profoundly altered their ecology, economy and society, its persistence over many decades and even centuries, resulted in a new mode of life that was relatively stable. During the first two centuries, the trade was controlled almost entirely by monopolistic enterprises, chiefly the Hudson's Bay Company. Only after 1870, when the Bay monopoly in Rupert's land was broken, did the influx of independent white trappers and traders result in another major disruption of Indian economy and society, and in some cases severe despoliation of the fur resources.

The Eskimo experience with the fur trade was by comparison compressed, and in some ways reversed. The history of the trade in the Western Arctic is described in more detail in the following chapter, so only a broad outline for the Arctic as a whole need be given here.

The white fox trade had its beginnings in the last days of the whale fishery, in both the Eastern and Western Arctic. The establishment of the Cape Wolstenholme (Quebec) post in 1909 marked the real beginning of the Hudson's Bay Company's Arctic trade, for although they had regularly sailed through Hudson Strait for 240 years they had never exploited its shores.¹ The expansion of the trade was extremely rapid; the network of posts and the induction of the Eskimos into the trapping and trading system being virtually completed within 15 years. Although "The Bay" spearheaded this thrust, it was everywhere faced with competition both from large trading concerns and individual entrepreneurs. The Eskimo experience was thus quite different from that of the Indian, due to its much later and much more rapid development and, particularly in the Western Arctic, because the fur trade was fiercely competitive from the very beginning.

Two immediate results of this flurry of activity were the decimation of native populations through disease, and the destruction of their major food resources, especially the caribou. Unlike the Indian experience, where severe depredation of the fur bearers themselves occurred, there was probably never any widespread over-harvesting of the white fox itself.

The Depression ruined most of the free traders and even the larger trading concerns, and by World War Two, the Hudson's Bay Company had overcome most of its competition. The total number of posts in operation in the north had declined greatly, and the future pattern of settlement, based on the established fur trade

¹In fact the first post for the Eskimo trade was the short lived Fort Anderson in the Western Arctic, established in 1861 (see Stager, 1967). Although such long established Northern posts as Fort Chimo and Fort McPherson engaged in some Eskimo trade, they lay within Indian territory and traded chiefly for the pelts of forest fur bearers.

centres, was well established. The monopolistic position of the Hudson's Bay Company in the Arctic thus dates only from the late 1930s.

The end of the traditional fur trade era came with the declining fox prices and the resulting Arctic-wide depression of the late 1940s. This was a time of severe hardship, and by comparison the Eskimos had come through the Great Depression of the previous decade unscathed. Although fox prices improved subsequently, increased opportunities for wage employment after 1955 proved both the immediate salvation and the subsequent (although still inadequate) basis of the Arctic economy. As the fur trade waned, and alternative sources of income became available to the Eskimos, in 1959 the Fur Trade Department of the Hudson's Bay Company changed its name, significantly, to the Northern Stores Department. The small unheated stores in which ammunition, calico, flour, sugar, tea and lard were the main items of trade have been replaced all across the Arctic by larger structures, with counters displaying stuffed olives, perfumes and bargain-basement dresses; whose managers are more merchandise conscious than fur conscious. The source of power, money and authority in the North today lies not with the fur trade but with government services and administration.

Similar post-war developments have occurred in the Subarctic forest regions. As a result, the objective socio-economic positions of the Indian and Eskimo with regard to the fur trade have become very close during the last two decades, despite their profound historical differences.

The northern trapper today

The Northern trapper lives typically in a small isolated rural community, and is almost invariably non-white. Most trappers are members of what it is now fashionable to call the subculture of poverty. Characteristically, the trapper must supplement or even obtain the bulk of his income from alternative economic pursuits.¹ The main causes of poverty in trapping communities are a declining or static resource base, declining prices paid to producers, an increase in the number of producers, and the high cost of trapping.² The centralization of people into a few large communities has often led to the local overexploitation of the fur resource, but also to its underutilization in the distant hinterlands. Often the trapper is

¹Although perhaps 54,000 people engage in trapping in Canada, the 1961 census listed only 3,718 people in the occupational category of trappers and hunters, and of these, very few are primarily trappers. For example, most people engaged in trapping in northern Saskatchewan earn less than \$500 per year, while less than ten per cent earn over \$1,000 (Buckley, 1962:31). In the N.W.T., numerous community studies have invariably shown low trapping incomes. In the Keewatin District, during 1967-68, of a total male Eskimo labour force of 460, 251 had some income from trapping. Their median income from this source was just over \$200. Only fourteen of their number trapped over \$1,000 worth of fur, and none earned more than \$4,000 (from unpublished data from the Keewatin Manpower Survey, conducted by the Economic Staff Group, Dept. of Indian Affairs and Northern Development, January 1969).

²Most trappers employ dogteams as their means of transport. The cost of feeding a team can amount to several hundred dollars annually, especially if commercial feed is necessary. In addition, firearms and ammunition, boats and gasoline, traps and other gear all contribute to the high cost of trapping. A complete outfit, whether for the bush or the tundra, today costs thousands of dollars. At Sachs Harbour, the annual operating and depreciation costs per trappers are presently calculated to be nearly \$1,300.

undercapitalized. His income is intermittent, due to the seasonality of trapping, and unpredictable due both to the biology of the resource and to uncertainties of price. Since expenditures are both fixed and continuous, the trapping economy operates necessarily on a system of personal credit. Although the basic function of this credit is to increase the efficiency of the trapper, its availability can become restricted under certain conditions, thus reducing efficiency and productivity. Due to the necessity of maintaining a high credit rating, the trapper is unable to act as a free agent in an open market, and is forced to accept less than optimum payment for his produce. The need to realize income from fur as soon as possible also prevents many trappers from maximizing their selling prices.

Sociologically, the trapper appears to have extremely low status in the national context.¹ This appears to be due in part to his low income and educational achievements, but is no doubt compounded by the fact that he is usually a non-white. The community he comes from is very often characterized by what some have likened to a colonial caste system (Dunning, 1959b and Kew, 1962), yet economic and social opportunity elsewhere is equally restricted for he is unequipped for other than unskilled labour.

This social immobility is matched by spatial immobility. The trapper is tied by his considerable capital investment in trapping gear, by his rent free house and tax free land (usually he is a squatter on Crown, mission or Hudson's Bay Company land), by his deep ties to kin and community, and probably by indebtedness to the trader.

Numerous difficulties threaten the basis of the trapping economy, most of which are beyond the trapper's control, individually or collectively. They have no access to the national levers of power since they are few in numbers, scattered and isolated, and low in prestige, education and income. They have no economic power, and due to their individualistic way of life they have no tradition of collective political action.

There is no doubt that many native trappers will ultimately have to give up trapping and indeed some may have to quit their northern home altogether. How they may do so with a minimum of hardship and dislocation is a question worthy of much more consideration than it is presently receiving. And unquestionably, northern youths will increasingly seek other occupations than trapping. Yet all this lies in an indefinite future. A year, a decade, or even a generation from now, there will still be trappers in the north, and trapping will still be an important sector of the northern economy.

Credit, marketing, organization and government policy

Credit, as we have noted, is an essential feature of the fur trade, both for short term financing within the annual economic cycle and for long term financing where

¹Two Canadian studies by Blishen (1958 and 1967), based on a combined measure of income and education, place trappers at the very bottom of a list of over 300 occupations. These rankings correlate very highly with others based on subjective assessments of occupational prestige.

the population dynamics of the resource itself are cyclical. Ideally its function is to enable the producer to become as efficient as possible. To do so it must provide the producer with unrestricted purchasing power for his essential and expensive capital equipment, but frequently this condition is not met. For example at Cumberland House, Saskatchewan, meagre credit availability prompted Kew to observe that "rather than a means of encouraging trapping, credit has become a means of permitting trapping" (1962:81). Credit available to individual northern trappers, whether from traders or government agencies, normally is in the hundreds of dollars (or even less), where very often the need is in the thousands of dollars. Insufficient grubstakes not only hinder successful trapping, but also prejudice the likelihood of their repayment. Yet most creditors either have not the resources to provide advances on this scale, or given uncertain conditions cannot be expected to do so. Thus self-improvement through trapping becomes beyond the power of the trapper himself.

Two main factors appear to restrict credit availability. One is economic slack or decline, either locally or in the fur market as a whole. The other is competition among traders or auction houses. When competition is keen the trader keeps a tight reign on debts, for by bringing his furs to a rival trader in the spring, the trapper can satisfy his needs without first having to clear his previous obligations. On the other hand, the trader must extend sufficient credit, and even be willing to write off certain debts in order to keep the trapper from completely defecting to a rival.

A high credit rating requires the trapper to be a regular client of a particular trader or auction house, which can amount to a bondage. The trapper can "play the market" only at the cost of losing his credit rating. But his credit rating is fundamental to his operation, and so he almost invariably sacrifices his freedom in the market place. Whether the trapper deals with a local trader or sends his furs to auction, the economic structure of fur marketing is such that maximization of sale price and high credit ratings are simply incompatible. In Saskatchewan, where a government fur marketing service was introduced, the immediate effect was to reduce the credit extended by private traders, with the result that many trappers found no advantage in the higher prices paid by the government service (Buckley, 1962).

The bond between the trader and the trapper is in any case a very complex one, involving the brokerage of favour and influence, loyalty and longterm wellbeing in addition to the perfunctory buying and selling of furs and commodities. It is much more than a "cash and carry" transaction, and decision making, especially on the part of the trapper, is seldom based on short term maximization of economic gain (an excellent discussion of this relationship may be found in Kew, 1962, Chapter 10).

Trappers have even less control and influence over the marketing of their furs subsequent to the transaction at the local trading post, due to their ignorance of the nature of the fur market and their inability to act collectively in their own economic

interests.¹ Partly because trappers have been so isolated and powerless, they have failed to obtain certain economic advantages like price supports and marketing boards, which many of their colleagues in fishing and agriculture enjoy. Trappers in such provinces as Ontario and Saskatchewan have made some gains in this direction, but in the Northwest Territories, the trappers are not effectively organized. Individual trappers have publicly called for price supports, and almost every community has a trappers' council, but these tend to have little authority or power. There does not yet appear to be much solidarity among Territorial trappers as a whole, and regional meetings are often given over to inter-community rivalries and disputes.

The Northwest Territories Government has recently instituted a system of advance payment to trappers to encourage the sale of furs at auction to obtain higher prices. It is too early to assess the benefits of this programme, and particularly its effect on credit availability.

Those charged with game management in the Territories have certainly attempted to encourage trapping, within their limited means, but unquestionably the main thrust of government economic policy in the North is no longer predicated on the renewable resource base. The development of minerals, gas and oil, and the continued expansion of government payrolls in construction and services are presently seen by both Federal and Territorial officials as the most suitable and effective means of economic growth. The fur resource appears to be viewed as an anachronistic leftover, barely capable of supporting some of the older people, but from which the younger generation should certainly be weaned, despite the fact that it is the second most valuable natural resource in the north, and the one most accessible to the largest number of native people.

The undeniable result of this approach has been the neglect of the fur resource, and the almost complete lack of encouragement of the trapper. The consistently negative response by government authorities to demands for floor prices, increased credits and loans, and marketing agencies, reflects not only the important political and economic difficulties inherent in these remedies but the underlying belief that there is no real hope for the fur market or the trapper, and that furs cannot continue to be an appropriate basis for the economic life of even a part of the northern community. This belief is not entirely correct, and in any case rests partly on circumstances which both northerners and their governments have the power to alter.

¹For example the trappers have no trade organization comparable to the Canada Mink Breeders Association. They must rely (although they are generally unaware of this) on the efforts of the Department of Industry, Trade and Commerce, which, with the assistance of Department of Agriculture officials, exhibits representative selections of Canadian furs at European fur fairs. The Department of Indian Affairs however, has not recently made any effort to promote white fox or any other wild fur produced by N.W.T. trappers, with the exception of trying to counter the recent sealskin boycotting campaigns in Western Europe.

The Bankslanders as trappers

The remarkable proportion of Canada's white fox production supplied by a mere fifteen to twenty trappers on Banks Island has already been mentioned. There seems little doubt that the top Banksland trappers are presently the best white fox trappers in the world. The individual catches of the leading trappers often exceed 500 foxes in good years. The record individual catch on Banks Island is 941 pelts, made in 1966-67, and so far as is known this is a world record.¹

This success is due to modern equipment and methods used, and to the skill and hard work of the trappers. Steel traps are used exclusively: deadfalls and snares are unknown today. Some of the best trappers run 800 to 1000 traps on lines up to 300 miles long. Some Eskimo trappers at Read Island, and a few white trappers on the mainland, used to run comparable lines, but they are no longer active. Although a few trappers in other parts of the Canadian Arctic also run long lines, they do not place nearly as many traps on them.²

The Bankslanders not only run long lines with many traps, but these are checked frequently and carefully. Six or seven trips a year of two weeks each are typical. Accounts of trapping elsewhere again indicate that other trappers usually spend less time on the trail, and accordingly, loss ratios of trapped foxes are higher. Skill and knowledge cannot be so easily measured and compared, but there is little doubt that the Bankslanders are outstanding in this regard as well. Most important is the orientation and motivation to the trapping life, and no people have a stronger tradition of trapping than the Bankslanders. The system of arctic fox trapping discussed in these volumes is the most highly developed and successful one in the world.

¹There were a few excellent trappers at Read Island in the 1930s and 1940s, one of whom reached 900 in a peak year. One trapper at King William Island was reported to have taken over 900 foxes on one occasion (personal correspondence, L.A. Learmonth, 5 March, 1968). N.W.T. game records indicate that for the most part, high catches on the Arctic Coast east of Read Island, and in the Keewatin, did not exceed 300-400 foxes. It seems doubtful that any white trapper in the north ever caught more than 500 in one season. There is no indication that Alaskan or Greenland trappers fare nearly as well, although some relatively high catches may have been made in Alaska in the early years of this century. The Soviet literature suggests that individual trapper productivity there is low. Most white fox trapping is in any case done by reindeer herders on a part time basis. There appear to be relatively few Soviet northerners whose primary profession is trapping. According to Tchirkova, the best trappers in the European U.S.S.R. took up to 170 foxes in the peak year of 1947-48 (1958a:112) and in the peak year of 1946-47, the leading trapper in all of Yakutia took 183 foxes (ibid: 136). A recent article by Syroechkovskii (1968) indicates that individual catches of 40 to 60 foxes in the Yenesei north are considered excellent.

²In the Eastern Arctic, for example, it would be considered most unusual for a man to own more than 300 traps, and the average is much less. According to Chesemore, no one trapping out of Point Barrow, Alaska, in 1962-63, had more than 200 traps (1964? :25). Norwegian trappers in East Greenland used to set 150 traps at the most (Goodhart and Wright, 1958:183). Accounts of the Soviet trapping industry (viz. Geller and Skrobov, 1967; Lavrov, 1932; Romanov-Il'inskii, 1958; and Skrobov, 1955) suggest that many foxes are still taken by means of deadfalls, snares, nets and rifles. Where steel traps are used, no individual tends such large numbers (ownership of traps of course rests with the trapping or herding collectives).

CHAPTER TWO

THE DEVELOPMENT OF THE FUR TRADE IN THE WESTERN ARCTIC: HISTORICAL ANTECEDENTS TO THE COLONIZATION OF BANKS ISLAND

From time to time during the past 80 years, the resources and strategic position of the Western Arctic have attracted the attention of the outside world: whalebone in the 1890s, fur in the 1920s, the DEWline in the 1950s, and now petroleum. Each has brought dramatic changes to the economic and social life of the native inhabitants, and to the character of the region itself. The colonization of Banks Island must be viewed in the context of these events.

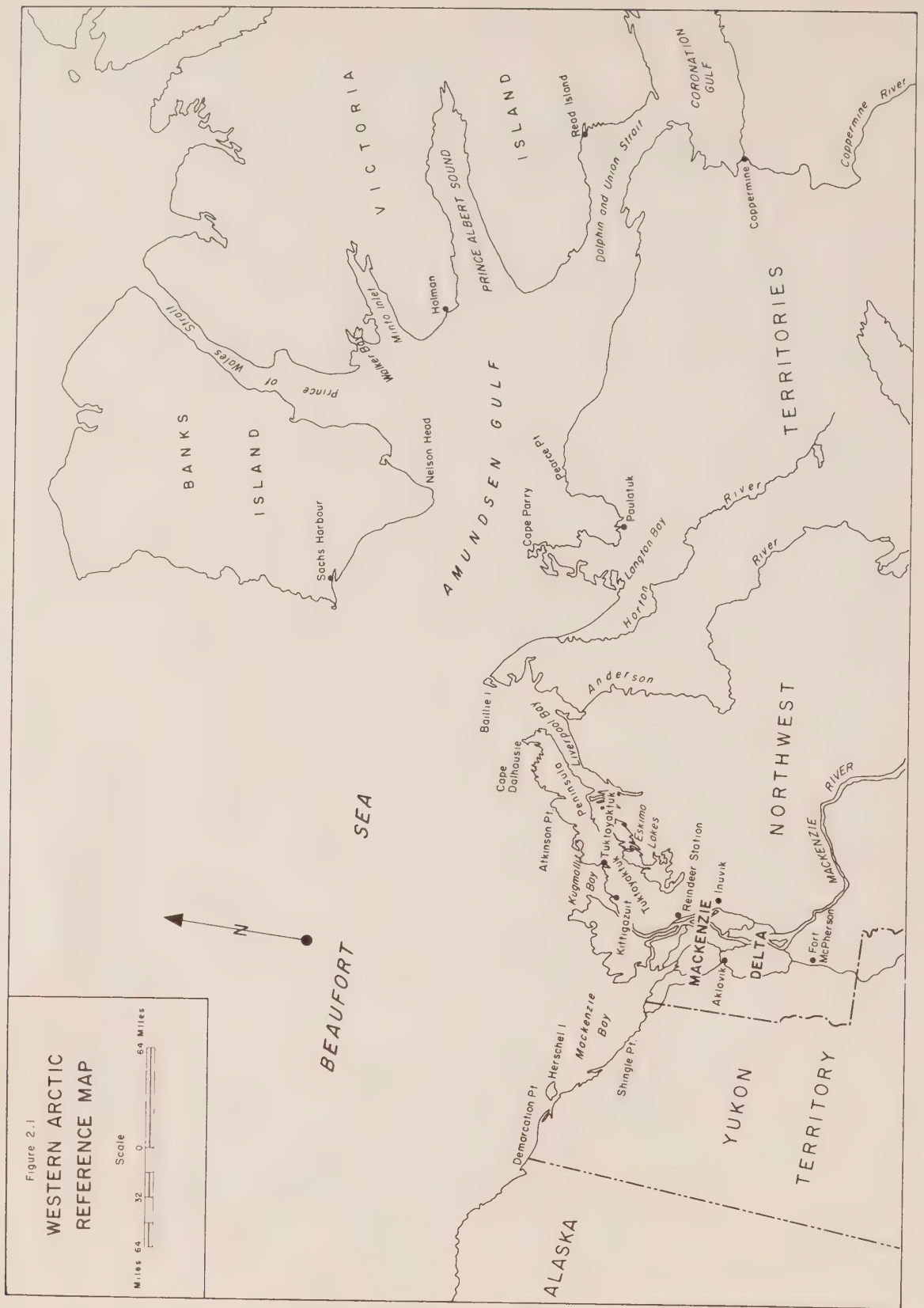
The aboriginal people of the region, numbering about 2,500, were known as the Mackenzie Eskimos.¹ They inhabited the coast between Herschel Island and Baillie Island. They maintained friendly intercourse with their Alaskan Eskimo neighbours to the west, but had no contact with the Copper Eskimos to the east. To the south were hostile Indian tribes. Banks Island, of which the Mackenzie Eskimos were unaware, lay apparently uninhabited. The appearance of the American whaling fleet at Herschel Island in the 1890s was of profound consequence to the Mackenzie people, who until then had been largely unaffected by the white man. Ultimately the peculiar nature of their contact with whalers and traders forged a way of life unknown in other parts of the Arctic.

The impact of the whalers

The Alaskan coastal Eskimos had been in contact with the whalers since the 1850s, and by the time whaling commenced in Canadian waters, many of the changes in demography and ecology which were to occur on the Canadian side had already been experienced by the Alaskans. Disease, for example, took a heavy toll among them, especially the coastal people. As the coastal Eskimos died off, the inlanders moved into their villages to take their place, so that while the coastal village populations remained more or less constant, the hinterlands were almost completely depopulated (Stefansson, 1913a:451). The new coastal residents, having retained their caribou hunting skills, were particularly valuable to the whalers as meat hunters.

According to Stefansson (1919:194-95), a few Alaskan Eskimos had already moved into the Mackenzie Delta country before the whalers began wintering in 1890. They may possibly have come in search of better hunting grounds, due to the already dwindling country food supply in their own territory. However, after the whalers came, there arose a modest but steady immigration of Alaskans. Not all stayed, but most of those who did must have been inlanders, for the immigrants shared a predilection for caribou hunting and were indiscriminately called Nunatamiut by the Mackenzie Eskimos.

¹For further information on the Mackenzie Eskimos and their early contacts with explorers and Hudson's Bay Company fur traders, see Usher, in press.



The whalers were a totally new phenomenon to the Mackenzie people. They came in great numbers, in overwhelmingly large boats, with a variety of goods and tools. The year round presence of these people and their material culture made Herschel Island an important place to the entire Mackenzie group: a place which would be visited at least once a year by practically everyone. The nature of contact was therefore very different. Formerly, parties of adult men had gone on trading expeditions to Fort McPherson perhaps once a year, and were in contact with a small number of white men for a few days at the most. Now, men, women and children alike were in close contact with American whalers (as well as acculturated Alaskan Eskimos) for extended periods. They worked with them, traded with them, socialized with them, even inter-married with them; they learned their language, their customs, their technology, their value systems and economic goals. They did not adopt all of these, to be sure, but they did become aware of them as alternatives.

At first the traffic between the native peoples and the whalers was mainly in meat. With as many as 600 extra men in the region to feed each winter, the demand was tremendous. This hunting was done chiefly by the Nunatamiut from Alaska, as they were by training and inclination much more suited to that life than were the Mackenzie people. Native meat hunters were outfitted by the whalers on a credit basis; a system which carried over quite readily to the new fur trade which was then beginning.¹

Population decline and regrouping

Just as the Alaskan inlanders took the place of their coastal brethren felled by disease, so the Nunatamiut eventually became the majority of the Canadian Western Arctic population. The Mackenzie people were subjected to catastrophic epidemics and by the end of the whaling era, they were at a fraction of their former numbers.

In 1905, the total native population between Demarcation Point and Baillie Island was somewhat over 350. Of these, 250 were "Kogmollicks" (the local name for the Mackenzie Eskimo at that time), 100 were Alaskan immigrants, and there were a few "Masinkers", as the Bering Strait Eskimos brought in by the whalers as meat hunters were called (R.N.W.M.P., 1905, Pt. 1:129). The Mackenzie people retained their coastal orientation, the three largest groups being at Herschel, the eastern mouth of the Mackenzie, and at Baillie, ranking in size in that order. The Alaskans and "Masinkers" hunted in the Delta and Richardson Mountains most of the year.

On the Alaskan coast, as the fur trade replaced whaling, Barrow Eskimos began moving east to formerly uninhabited areas. Trapping camps of two or three families each dotted the coast from Barrow to Demarcation Point. This new orientation gave renewed impetus to Alaskan immigration to the rich trapping areas of the Mackenzie Delta, especially as fur prices began to rise. This second wave of Alaskan migrants arrived mainly in the decade 1913-23. The regional population decline was reversed, although by 1924 fully 75 per cent were considered to be of Alaskan origin (PAC, NA&NR/NAB 6217).

¹The credit system appears to have been a much more prominent feature of the reorganised fur trade of the twentieth century than of the early inland trade.

The transition from whaling to the white fox trade

From the beginning of whaling, both the whalers and the Alaskan immigrants trapped around Herschel Island and it seems likely that steel traps were introduced to the country at that time. In addition to trapping themselves, the whalers traded with the local Eskimos and even outfitted some to trade on their behalf. Speaking of the turn of the century, Captain Bodfish observed that:

“Arctic whalers were trading ships as well as whalers, and it was quite on the cards that a good profit might be made in trade even if very few whales were taken. There had always been some trading, but I think the trading had developed to a new high level at about this time, owing to increased knowledge among the whalers, and likewise among the natives.” (1936:191).

Such furs as marten, mink and coloured fox probably accounted for the bulk of the trade, since the Alaskans, who were considered the superior trappers both in ability and inclination, spent much of the winter hunting inland. Polar bear hides were also in demand and brought a good price. Those whalers who engaged in trapping took white fox almost exclusively, as they ran short lines along the coast. Between them and the coastal Eskimos, probably several hundred pelts were taken annually; perhaps several thousand in good years.

Thus did the Eskimos of the Western Arctic become early and thoroughly acquainted with trapping and the white fox trade. It is significant that this involvement was by an early date no longer with a monopolistic company offering only a limited range of goods, but with a highly competitive situation in which a great variety of goods could be obtained in trade. Many of these articles were new to the Eskimos, and as Stefansson pointed out, were ones “...which even the Hudson’s Bay factor at MacPherson (sic) had been compelled to do without.” (1913b:39). They were moreover, considerably cheaper than Bay trade goods, by virtue of having been shipped directly by sea from the American west coast rather than overland across Canada. By 1900, Bodfish was taking orders from Eskimos at Baillie Island for goods from San Francisco, to be brought up the next year (1936:191). Such orders were not for flour and tea but for whaleboats and the finest American rifles. In Alaska, some Eskimos were sending their furs directly to the Seattle auctions as early as 1911. (Sonnenfeld, 1957:290). In short, unlike other parts of the Canadian Arctic, the new Western Arctic fur trade was characterized by individual enterprise, competitive trade, and an abundance of material goods; an economic milieu already familiar to the Eskimos of that region from the whaling days.

The character of the fur trade was unsettled at this time, and would alter considerably in the next few years. The decade following the collapse of the whaling was a hiatus in the fur trade as well. Only two or three ships wintered in the Arctic any longer, and sometimes none at all. Often a few more came in summer only. Of the hundreds of men who came north on the whaling ships in 1890s only a handful chose to remain and take up trapping and trading for a living. In 1910 there were probably less than a dozen white men living independently on the Arctic Coast.

Theirs was not an easy life. They were not skilled trappers, and fur prices were still relatively low. They did not do as well as the natives in trapping, and sometimes

required social assistance (R.N.W.M.P., 1919:154-55). The Eskimos themselves, now so used to the presence of ships and a handy supply of trade goods, also faced hard times when the ships failed to arrive, although they were still capable of reverting to a greater dependence on hunting and its produce.

As World War One commenced in Europe, an age had ended in the Western Arctic. The whale fishery had collapsed, and the musk-oxen and caribou had been exterminated or driven out. Most of the original Eskimo population had died, although they had been replaced in part by Alaskan Eskimos. Regardless of origin the resident population would have been unrecognizable to their aboriginal forefathers, in their social characteristics at least. They had become oriented to a market economy, and dependent on the white man for many foodstuffs and hunting and household implements. New models of economic, social and religious behaviour were available for imitation and adaptation. A different people with a different culture and different roles, were adapting to a changed habitat and new opportunities.

Despite the relative quietude and leanness of the years before the war, the Western Arctic was on the verge of an explosion in commercial enterprise and prosperity, and of a vastly expanded frontier. The preceding years had introduced the native population to the nature and mechanics of North American trade and commerce sufficiently that they could take advantage of the opportunities to come. In subsequent years they would help to create and take an active part in a new way of life; one which would provide the region with a regular livelihood and occasional wealth for three decades. It was to develop furthest and last the longest on Banks Island.

The fur trade boom of the 1920s

The possibility of new and changing trapping hinterlands was seen shortly after the turn of the century. The Hudson's Bay Company and other newly active business interests in Western Canada competed for control of the Mackenzie Valley and Delta trade, and both were aware that a rich fur harvest from the coast was being denied them by the American presence at Herschel Island. Fur prices were beginning to rise, especially white fox, and the American traders sought new trapping grounds as well. In 1905-06 Captain Klengenberg wintered on Victoria Island amongst the Copper Eskimos, as did Captain Mogg in 1907-08. Once the Coronation Gulf Area and its people were made known, it became a target of traders, missionaries and the Government alike. Between 1910 and 1916, effective contact was made with the Eskimos of that area, and they were soon oriented to the trapping economy and the rifle (Usher, 1965:48-50). By 1923, the fur trade had reached King William Island, an advance of fully 600 miles in little more than a decade.

Two centres arose to serve the Western Arctic fur trade region: Herschel Island and Aklavik. Herschel was the western terminus and chief trading centre of the elongated hinterland of the coastal white fox trade, over which San Francisco interests and the Hudson's Bay Company now struggled for ascendancy. The extensive and scattered nature of the resource and its harvesters led both sides to push rapidly eastward, as has been described.

In the Delta, a different situation prevailed. The region was smaller and more clearly defined, and its resources were of much greater density. The population, which consisted largely of Alaskan immigrants, was confined to a relatively small area, and did not have to range as widely to exploit the resource. The native Mackenzie Eskimos had never lived permanently in the wooded country of the Delta, and remained largely on the coast. The Delta people were therefore the ablest and most energetic trappers, and indeed the most recent immigrants had come mainly for that purpose. They found an abundance of mink and muskrat, and also of coloured fox, marten, beaver and other fur-bearers of the northern woods. Aklavik had been established as the trading centre for the small but rich hinterland of the Delta in 1912, and represented the first downstream extension of the Hudson's Bay Company's trade in 72 years. Itinerant white trappers and traders began descending the Mackenzie as far as the Delta after 1918.

By the early 1920s the value of both muskrat and white fox had increased twentyfold since the turn of the century, and the price of other furs had risen in similar fashion. Muskrats were taken by the hundred thousands, and mink was also a big crop in the Delta. Traders realized excellent profits, and the Delta trappers attained unprecedented prosperity; indeed many had far greater incomes than the average Canadian at the time. Although much of their money was dissipated on ephemeral luxuries, the Eskimos began to invest considerable sums in capital equipment. Gas powered whaleboats and schooners were the most popular items. In 1924 the Eskimo fleet at Aklavik consisted of 39 schooners (19 of which had auxiliary power), 28 whale boats and two other vessels. This was estimated to have represented an investment of \$128,000, which had all been made in the previous five years (Toronto Star Weekly, 19 February, 1927).

The Herschel Island trade was in the early days conducted entirely from shipboard, via the Bering Sea route. The Hudson's Bay Company established the first permanent post at Herschel Island in 1915 and in subsequent years, many others eastwards along the coast. Captain Pedersen, who traded for their American rivals, H. Liebes & Co., only briefly experimented with permanent posts. Coming into the country every summer via the Bering Sea route, which allowed him to trade along the Alaskan coast as well, Pedersen was able to offer a wide range of high quality merchandise at lower prices. After breaking with Liebes in 1922, Pedersen sailed north on his own. No master had a greater knowledge of the waters of the Western Arctic than he, or as great a fund of goodwill amongst Eskimo and white trappers alike. Within three years his Northern Whaling and Trading Company had driven his former employers from the Canadian trade (PAC, NA&NR/NAB 4244), and was providing stiff competition to "The Bay" as well.

Regulation of the fur trade

The Dominion Government was not unaware of this sudden burst of activity on its northern frontier. The N.W.T. and Yukon Branch was under considerable pressure from the Hudson's Bay Company and other Canadian trading interests to enact measures which would offset the advantages the Americans enjoyed. Missionaries, scientists and police officers who saw the dangers of unrestricted trading, hunting and trapping also acted as a pressure group for wildlife conservation

and the protection of the Eskimos from commercial exploitation. Very often both of these goals could be accomplished by the same means, and the Northwest Game Act, enacted in 1917, and the numerous amendments to it, especially during the 1920s and 1930s, reflected this. It was widely held that the Eskimos should be left to their own ways as much as possible, and the Government was reluctant to extend the trapping frontier.

From the outset, a licencing and recording system was applied to all trading, trapping and hunting activities by other than the indigenous peoples. Victoria Island was set aside as a game preserve for the exclusive use of native Eskimos in 1918. Within a decade this preserve was expanded to include all of the Arctic Islands and the mainland north and east of Bathurst Inlet. No whites were allowed to trap or hunt in the preserve, and very strict limits were placed on the establishment of new trading posts on the Arctic Islands. These regulations by implication ensured that any subsequent opening of new trapping grounds would have to be effected by Eskimos themselves.

In 1924, a longstanding regulation prohibiting coastal trade by foreign ships was invoked by the Customs and Excise Branch with regard to the Western Arctic (PAC, NA&NR/NAB 4130). This was partly in response to lobbying by the Hudson's Bay Company and others, but it also reflected fears of increasing U.S. interest in the Canadian trade (which did not in fact materialize) following the Soviet exclusion of American traders from the Kamchatka – Anadyr coast in 1923.

Formerly Pedersen had made several stops along the coast as far east as Baillie Island. He was now forced to declare and pay duty on all his goods immediately upon landing at Herschel, whether they were sold or not, and moreover was not allowed to proceed beyond Herschel. To comply with this ruling, Pedersen built a bonded customs warehouse at Herschel and a trading post there the following summer (PAC, NA&NR/NAB 4244). A Canadian subsidiary, the Canalaska Trading Company, was also formed with Vancouver business interests, which would take delivery of goods at Herschel and conduct the coastal trade from a smaller over-wintering schooner under Canadian registry.

P.C. 1146, 19 July 1926, required traders to obtain a licence for each post operated, specifying the location. An amendment in 1929 stipulated that all trade be conducted in permanent buildings, open for business at least eight months of the year. This regulation, enacted under pressure from trading concerns with a large fixed investment in posts and outfits, was designed to eliminate the schooner trade and the practice known as "tripping". In the latter, itinerant traders sledged out to the trapping camps and traded with the Eskimos in mid-season, obtaining furs for lower prices, and as a result increasing the defaults on debts to the established posts. The Canalaska Company and the smaller free traders along the coast were required to establish permanent posts in order to continue their activities.

Despite these various strictures and regulations, the fur trade continued to thrive and grow, due to a more or less steady increase in prices. White fox had risen sharply toward the end of the war and after, due to a fad for summer furs in the U.S., and improved dyeing methods, to which this fur was well suited. Its value

continued to rise during the decade, and by 1929 stood at \$54.15 in the N.W.T. Blue fox was at \$78.60, red at \$37.42, cross at \$80.81 and silver at \$104.65. However, muskrat prices had declined slightly during the late 1920s.

Overharvesting and its consequences

The Delta, until the 20th century, had never been occupied on a year round basis. Although the Alaskan immigrants found abundant resources, these were soon overharvested. The mink catch declined from 21,205 in 1923-24 to 3,630 in 1927-28 (PAC, NA&NR/NAB 6026). The muskrat harvest declined in the mid 1920s, and then rose again, but due to unsteady prices the total harvest did not increase in value during the decade, and more trappers were sharing it. In 1921-22 there were 140 licenced white trappers in the N.W.T., while five years later the number had risen to 500 (Zaslow, 1957:55). Most of these men came to the Mackenzie River district, and while many remained around Great Slave Lake and the upper part of the river, increasing numbers came to the Delta, and later, the coast. Some of the Delta Eskimos moved their camps northward within the Delta, to keep ahead of the white trappers (R.C.M.P., 1929:99), others moved east to Baillie Island, Parry Peninsula and Pearce Point (Metayer, 1966: 159-60).

Relations between the remaining Mackenzie Eskimos and the Alaskan immigrants were cool and aloof. Corporal Wall of the Pearce Point Detachment observed that:

“The natives in the western half of the Baillie Island district, especially, those at Tuktukaktok (sic), are not so prosperous as the natives in the eastern half of the district. This may be due to the fact that they are all Canadian-born Eskimos and have not had the advantages of the schools that the Alaskan natives had, who form the majority of the native population in the Cape Parry district. The Tuktukaktok (sic) natives follow more the old mode of living, and do not care to associate with the Alaskan natives and blame them for the shortage of game.” (R.C.M.P., 1930:88).

Many whites had commented on the differences between the Mackenzie and Alaskan Eskimos, from the earliest days, and in general favoured the latter on the grounds of their greater familiarity with white culture and language, and their greater “ambition” and sophistication in trapping and hunting. The Mackenzie Eskimos from the start considered the Alaskans as interlopers, and blamed them for despoiling the country. Friction had occurred in the 1890s over the alleged use of poison for hunting and trapping by the Alaskans (Stefansson, 1919:155), and in later years they were blamed for the destruction of fur and game in the Delta (Metayer, 1966:93).

The Alaskan Eskimos were interested in producing a cash crop in order to amass wealth beyond the daily needs of shelter and food, and were willing and able to employ superior technology, greater commercial sophistication and increased geographical mobility to do so. The Mackenzie people resented these attitudes, and the distinction between the two groups on this basis persisted for at least fifty years after the initial immigration. Indeed it continues today in modified form.

In the mid 1920s there was also an influx of white trappers to the coast, where for two decades there had been very few. Twelve came to the Baillie Island district in 1926 alone: some from the Delta, others from as far as Hay River, and of these, ten went to the Parry Peninsula. At the same time, more natives were coming in from the Delta (PAC, NA&NR/NAB 6217).

The winter of 1926 proved to be a poor one for foxes. By mid March, the highest individual catch was only 62, and there were 25 white and native trappers in the district. Many of the natives were talking of attempting the crossing to Banks Island, and the local police officer felt that if one schooner tried, others would follow (PAC, NA&NR/NAB 5762). In the summer of 1927, many of the white trappers, who had hoped for a quick fortune, retired to the more sheltered bush country, where food and fuel were easier to obtain, and the travelling conditions less harsh. Some Eskimos returned westward as well (Metayer, 1966:161).

The next two winters also produced small fox harvests. Of the poor returns of the 1928-29 season, the police officer at Baillie remarked:

“This will work a hardship on the natives who were not fortunate enough to get in on the first run as all now depend on the fox catch for a livelihood.” (R.C.M.P. 1929:75).

There was certainly a decline in the abundance of white foxes on the mainland coast, although its timing and extent are difficult to document due to the lack of production data before 1930. Numerous complaints were made by the Tuktoyaktuk Eskimos in the early 1930s that trapping should be prohibited on Banks Island as it was preventing the foxes from crossing to the mainland. The Tuk people claimed that trapping in their district had been poor ever since people started trapping on Banks Island, in 1928-29 (PAC, NA&NR/NAB 7161). These complaints seem to have been inspired more by traditional animosity than by empirical observation, as the decline on the mainland coast had almost certainly set in before then. In any case the catch on Banksland in 1928-29 was far too small to have affected the run. Indeed, no conclusive proof has ever been offered that Banks Island was the breeding ground and source of supply of the mainland fox population, or that foxes crossed Amundsen Gulf in great numbers other than in exceptional circumstances. Far more likely, the decline was due to overtrapping and the cessation of whaling. The temporary prevalence of beached whale carcasses provided an unparalleled food supply for foxes which may have allowed them to reach consistently high population levels with a minimum of fluctuation. Moreover, numerous accounts indicate that with so large a bait as a whale carcass, great numbers of foxes could be taken with a minimum effort, simply by surrounding it with traps and clearing them often. It is also true that white foxes and coloured foxes are competitive, and given sufficient numbers, the latter can drive out the former. Several of the older trappers in the region suggest that the intensive white fox trapping of the 1920s reduced the population to the point where coloured foxes could take over. With the white fox population driven so low, coloured foxes took over the dens, and even in later years, when trapping pressure eased, the white foxes could not recover their territory. Northward extensions of the range of coloured foxes have also been observed in the

Eastern Arctic (Macpherson, 1964) and in the Soviet North (Skrobov, 1960). Although coloured fox pelts were, in the late 1920s, worth as much as whites or even more, the animals themselves were less numerous and harder to catch, and so could not replace the white fox as an economic base.

By the end of the decade, the Baillie Island district was losing its position as the leading fox producer of the Arctic Coast. Both there and in the Mackenzie Delta competition for static or declining resources increased. The wealthier schooner owners contemplated journeys to Banks Island in search of new trapping grounds. Under the circumstances some traders, at least, were willing to provide these Eskimos with the enormous outfits required for such an undertaking.

One result of the fur trade boom and the subsequent over-harvesting was thus an expansion of the Eskimo trapping frontier. This had begun with the move to the district east of Baillie Island, and culminated with the colonization of Banks Island, and occasional voyages to northern Victoria Island and Coronation Gulf. This expansion reached its peak in the 1930s; however, it was by then a hollow frontier, for at the points of origin, Aklavik and Baillie Island, stagnation and decay had already set in. For most of the people of the Western Arctic, the crisis of the late 1920s was but the first of many which would, within 30 years, bring an end to their way of life.

The new people of the Baillie Island district

As we have noted, the Mackenzie people remained between Herschel and Baillie, hunting and trapping on the coast, whereas the Alaskans were more land oriented and occupied the Delta. As the Delta became more crowded, some of the Alaskans moved to the coast, mainly between Baillie Island and Pearce Point. At the same time, a small but important group of individuals had reached adulthood and were playing an increasing role in the economy. These were the so-called "half-breeds", whose mothers were Mackenzie Eskimos (mainly) and whose fathers were whalers. Especially in those cases where the fathers had remained in the country to trap and trade, the boys grew up as trappers, and their generation was much more akin to the Alaskans in its economic motivation and resource practices. In their residence they were also more associated with the Alaskan than the Mackenzie Group.¹

This nascent third group, composed of Eskimos of Alaskan origin (mainly from the second wave of immigration), more recently from the Delta, and half-breed Mackenzie Eskimos, became a more distinct entity in the 1930s. Their Alaskan origins became of less importance as time passed (especially in the face of a third wave of Alaskan immigration to the Delta in the 1940s). The decline of Herschel

¹Such camps as Booth Islands and Pearce Point were also favourites of the white trappers, and had been for a decade or so. Doubtless the presence of these men further aided the flowering of a corps of competent and ambitious white fox trappers in the district.

Island and the growth of Tuktoyaktuk made more clear the realignment of residence and ethnicity that had taken place. In the 1930s there were three Eskimo groups: the Delta people, mainly of Alaskan stock, the Tuk-Herschel people, mainly of the old stock, and the people to the east, around Baillie Island and Cape Parry, as described. The latter group, which emerged in the 1920s (although it was not recognized as a distinct group at the time), proved the most flexible in mobility of residence, and the most versatile in resource exploitation. Whereas the Delta people more specifically adapted their resource practices to the Delta ecology, and the old Mackenzie stock remained oriented to the ecology of the shallow, muddy waters and reef-bound coast off the Delta, the eastern group was versed in the skills of both land and sea hunting. Experienced in trapping mink, muskrat and marten, they learned to trap white fox on the coast and inland. Many had travelled widely along the Canadian and Alaskan coasts, and had been associated with whalers, traders and explorers. They had learned or retained skills in both inland caribou hunting and sea mammal hunting.

From this group ultimately came the majority and the most successful of the Eskimos who extended the trapping frontier in the late 1920s. These easterners were already the best white fox trappers — in a good winter, some got 200 or 300 foxes, perhaps more. Trapping was no longer a sideline; it was their way of life, to which all other activities were adjusted. They were keen traders, and many had obtained large schooners with auxiliary power. Travel to Herschel Island or Aklavik was common in summer, and many of these Eskimos acquired considerable skill in coastal navigation and engine maintenance. In winter they travelled with equal facility over land or sea.

The development of a trapping elite

The idea that the best Eskimo trappers were either the children or the apprentices of white trappers has gained some currency. Although this is no doubt partly true, the actual connection is more subtle. Most whites, upon their arrival in the Arctic, knew no more about trapping white foxes than did the Eskimos. Although they introduced the basic technology (in particular the steel trap), a knowledge of white fox distribution, abundance and habits was equally necessary, and in this regard the Eskimos certainly had the advantage. What the white man did bring with him was the motivation to trap, and this he passed on to the Eskimos in varying degree, through having already enlisted them in the market economy in the whaling days, or through his presence as trapper in certain areas.

In the early days, Eskimo and white trappers learned simultaneously: sometimes independently, sometimes together, certainly with some cross-fertilization of knowledge through discussion and observation. The learning process in trapping continues throughout one's career. Today, even the best Eskimo trappers are still learning, but from experience only; they certainly have nothing to learn from whites. A better case could be made for white trappers introducing the skills for muskrat, mink and marten trapping, as many came to the Delta with previous trapping experience in the boreal forest areas. Yet, motivation was again at least as important as the skills.

Actual resource harvesting practices are a function of manual skills and basic intelligence, and can be learned or not depending on necessity and motivation. Resources themselves, however, are culturally perceived, and resource complexes come into being through a congruity of ecologically, economically and socially viable alternatives. In most parts of the Arctic, fox trapping is both ecologically and economically viable. Only in restricted areas, however, did trapping become a feasible and even desirable method of achieving certain sociological goals. This was the impetus which not only white trappers, but white traders and whalers provided, and which historically must be considered more significant than the diffusion of technology and skills. Where trapping is not itself a valued pursuit, it becomes merely a secondary adjunct to subsistence hunting, or more recently, to casual labour. Where it is valued, both excellence and perseverance in trapping results, and hunting is a secondary, though integral activity.

The decline of the fur trade

The crisis of supply became one of demand at the close of the 1929-30 trapping season. As the Great Depression began, muskrat prices fell by 75 per cent, and although fox prices did not drop as sharply, the catch around Baillie Island fell off so badly during the 1930s that hardship was no less severe for the coast trappers than for the Delta people. In both areas, individual trapping income probably fell below the national average wage level in 1930, and with the possible exception of the war years has continued to lag further and further behind.

Despite these conditions, trapping and trading activities intensified in the Western Arctic during the early 1930s. East of Amundsen Gulf, fox production increased significantly. For the Copper and Netsilik Eskimos, the 1920s had not been a decade of opulence, as they were relative newcomers to the world of commerce. There was no Depression for these people. The influx of white trappers and traders to the coast, particularly to Coronation Gulf, continued well into the 1930s, despite and even because of the Depression. At a time when industrial jobs were not available, and agricultural income was negligible, trapping and trading provided a reasonable alternative even with the prevailing low fur prices. There was in fact a profusion of trading establishments in the first half of the decade, and greatly increased competition at selected locations.

Many of the leading trappers, especially those who went to Banks Island or the east, continued to do well, largely by increasing their production. This colonization period coincided with the apex of the schooner days in the Western Arctic, as after 1935 virtually no more boats were brought into the country. The whale boat, which had replaced the traditional umiaks by World War One, was itself supplanted by the so called "schooners" (in fact most were single masted vessels of 35 to 45 feet in length). In the early 1930s there were over 50 native owned schooners in operation (PAC, NA&NR/NAB 5472), almost all with auxiliary power. In general, these schooners were owned by a single family head, although a few were owned jointly by two men. Nearly half of all the families in the region owned schooners at any one

time (there was some transfer of ownership). These boats were divided about evenly between the Delta community and the coast people.

Although the early 1930s constituted a minor boom for some of the trappers, and for the traders to the east, it was short lived. As prices continued to decline, and competition for limited resources intensified, the effects of the Depression became evident. After 1935, more posts were closing than opening. Traders' profit margins declined, and even the best trappers found themselves increasingly in debt.

In 1938, Captain Pedersen sold his interests to the Hudson's Bay Company. Although he had maintained a good share of the trade to the end, it no longer yielded much profit. "The Bay" moved their coastal headquarters to Tuktoyaktuk, and as people abandoned the Baillie Island district, both the trading post and the police detachment there closed down. Thus Herschel and Baillie, for almost a half century the two chief central places of the Arctic coastal economy, during both the whale fishery and the fur trade, had by 1940 entirely lost their importance. Ten years later a mere 81 people remained along the once busy and prosperous 500 miles of shoreline between Atkinson and Pearce Points. There was a gravitation towards Tuktoyaktuk and the Delta, which has continued to the present day.

Although the war years brought higher prices and breathed new life into the trapping economy, its days were now numbered. White fox prices in the N.W.T. fell from a high of \$36.00 in 1945 to \$6.50 in 1950. Coupled with the sharp post-war increase in the cost of living, this caused severe hardship all across the Arctic; much more so than had the general economic decline of the 1930s. In the Delta, however, the brief upturn in the price and availability of muskrats around 1950 allowed the ratting trade a final flourish. There was a revived immigration into the Delta, not only from the coastal areas but from Alaska as well. In 1948-49, a system of registered traplines was established in the Delta, in order to protect the livelihood of the established residents.

By 1948, the three groups of the 1920s and 30s had become two: the Delta people and the Tuk people. The former centred on Aklavik and was composed largely of the old Delta group, the former residents of Herschel Island, and the third wave of Alaskan immigrants who had come between 1946 and 1948. The Tuktoyaktuk people consisted of the remnants of the Kittigazuit group plus the majority of the former Baillie-Pearce group; a demoralized community whose once proud way of life had been destroyed by the near disappearance of their basic resource and of the market for it.

It was largely this economic crisis, which was by no means restricted to the Western Arctic, that awakened the federal government to the fact that its responsibilities in the north were greater than the simple assertion of sovereignty. A new department was established (Northern Affairs and National Resources), education and health facilities were extended and improved, and attempts were made to establish an economic basis for the Eskimos' existence.¹ It was not until the

¹ An excellent account of these events is given by Jenness (1964)

mid 1950s however, when the construction of the DEWline and Inuvik brought jobs and a major shift to wage labour, that economic salvation really occurred. The jobs were often temporary but the change irrevocable. The assumption of a wage position was frequently a more binding commitment than the Eskimos had first perceived; both their capital equipment and their inclination to trap were dissipated, so that a return to that activity became difficult or impossible. A very significant decline has occurred since 1955 in hunting and trapping activities as well as in camp life, as more and more individuals have moved into the major settlements. The great majority of the population is now urbanized. In the post-construction years, local resources have declined in importance as services and administration have become the chief income providing sectors of the economy, and those who for centuries produced those resources have accordingly found their life style and skills superfluous to the modern economy.

Banks Island – prelude to colonization: 1900-1928

In the latter days of the whaling era, the intensive fishing grounds shifted from off the mouth of the Mackenzie towards Banks Island. Many whales were taken off the southwest coast of the Island between Cape Kellett and Nelson Head. The ships also cruised the west coast when ice conditions permitted, and some captains reached at least as far north as Cape Prince Alfred. Only two or three actual landings on the Island are recorded (Stefansson, 1921:240, 258), and these were apparently between 1900 and 1905. Eskimo hunting parties from these vessels apparently did not go more than four or five miles inland, and although they did not see any other Eskimos, they did find recent camps and muskoxen remains.¹

The Northern Party of the Canadian Arctic Expedition occupied Banks Island continuously between 1914 and 1917. The *Mary Sachs* was taken ashore at a site now known locally by that name, between Cape Kellett and Sachs Harbour. Here was established the Expedition's base camp for explorations in the western Queen Elizabeth Islands.

The presence of the Canadian Arctic Expedition in the Cape Kellett area renewed the attraction of Banks Island for the northern Copper Eskimos, and several families began passing much if not all of the year on the southwest part of the Island. Commercial trapping on Banks Island began in 1914-15, as during that winter, some members of the Expedition trapped white fox as a sideline (Stefansson, 1921:286-87). Using steel traps set around the camp, or on one occasion, a nearby whale carcase, quite a number of foxes were taken with a minimum of effort, as the

¹Copper Eskimos had occupied Banks Island since about 1860, chiefly to obtain the wood and iron of McClure's abandoned *Investigator* at Mercy Bay. Further details on the aboriginal occupancy are provided in Appendix B.

animals were apparently abundant that winter. The next winter, there were parties at Mary Sachs on the Northwest coast, and both probably engaged in a little trapping.

Purely commercial trapping ventures were first made to the Island in 1916. J.R. Crawford, an American on the *Challenge*, landed two white trappers, Masik and Binder, at De Salis Bay to spend the winter, and then proceeded to Walker Bay on Victoria Island. Captain Pedersen, the last of the whaling captains in the north, who was now master of the Liebes and Company trading vessel *Herman*, landed two Eskimo families from Point Hope, Alaska at the mouth of the Masik River to trap. In addition, expedition members were also on the Island and engaged in trapping. Masik and Binder moved to the Kellett base later in the winter, and were hired by the Canadian Arctic Expedition. They left with the Expedition party on the *Challenge*, purchased from Crawford, who remained on the Island with an Eskimo family. Natkusiak, Stefansson's Alaskan Eskimo guide, bought the *North Star* from the Expedition in 1917. It was at that time frozen in on the northwest coast of Banks Island. He and some other Eskimos remained on the Island for four winters.¹ In 1919, after two consecutive summers of severe ice conditions, the *Herman* was finally able to reach Banks Island and pick up the trapping party at Masik River. At the same time, Crawford was taken back to the mainland. During their stay, the trappers had obtained several hundred foxes between them (C.T. Pedersen, personal communication, 3 June 1967). Natkusiak and two other Eskimos remained on the Island, and Pedersen left supplies for them at Cape Kellett (NhDstef, Correspondence, Pedersen to Stefansson, San Francisco, 4 November, 1919). Natkusiak left Banks Island in 1921, on the *North Star*. Pedersen, on the *Herman*, having gone to Banks Island to leave supplies for Natkusiak, met him off the mouth of the Masik River and towed him back to Baillie Island. Fred Carpenter recalls that Natkusiak and his party obtained approximately 1,000 foxes during their four year stay (Personal communication, 22 July, 1966).

This marked the end of the colonization of Banksland by imported Alaskan trappers. Pedersen had hoped to take Crawford north again in 1920, in charge of ten or twelve families (presumably Alaskans), with a three year outfit to trap on Banks Island (NhDstef, Correspondence, Pedersen to Stefansson, San Francisco, 26 December, 1919). In February 1920, H. Liebes and Company requested the N.W.T. and Yukon Branch of the Department of the Interior for information on regulations affecting colonization on Banks Island, and were told that there were no regulations restricting such activity (PAC, NA&NR/NAB 32). Restrictions were, however, clearly under contemplation at the time.

¹ According to Fred Carpenter, of Sachs Harbour, Natkusiak spent two years on the north coast of the Island, by which time he had run out of shells and was making his own. In the winter of 1918-1919 or 1919-20, he crossed the ice by dogteam from Nelson Head to Fritz Wolki's post at Horton River for supplies, and returned to Banks Island the same way (Personal communication 22 July, 1966, see also Manning, 1956b:36). There is only one other recorded instance of such a crossing, and it has always been considered extremely hazardous due to the possibility of moving ice and open leads in Amundsen Gulf at any time during the winter.

In March 1920, Banks Island was made a game preserve for native Eskimos (as Victoria Island had been two years previously). The preamble of the Order in Council gives the reasons for the revisions:

WHEREAS the Commissioner of Dominion Parks, who is administering the North West Game Act, has reported that a number of foreign trappers propose going into Banks Island, Northwest Territories, this year, for a period of three years, for the purpose of trapping in that Territory;

AND WHEREAS the difficulties of police control of this Territory prohibit proper supervision to prevent the illegal slaughter of game there;

AND WHEREAS this is confirmed by the Commissioner of the Royal Canadian Mounted Police who also advises that the hunting ground in the Arctic should be preserved for the native Eskimos:" (P.C. 533, 12 March 1920).

This put an end to the plan of Liebes and Company, for at this time Eskimos brought in from Alaska especially for trapping were treated as non-indigenous people under the Act. However, the interpretation of this regulation also prevented the Hudson's Bay Company from establishing on either Banks or Victoria Island, initially at least. The R.C.M.P. at Herschel Island were of the view that as traders invariably trapped and hunted also, and as it was then impossible to patrol the Islands adequately, that the establishment of posts there, although legally permissible, would *ipso facto* entail the contravention of the Game Act. This matter was resolved in 1921, and the Company opened up their trade on Victoria Island that year (PAC, NA&NR/NAB 3915).

During the early 1920s, it was generally thought at Herschel Island that the Copper Eskimos had ceased going to Banks Island since the departure of the Canadian Arctic Expedition. Natkusiak and his party had probably not seen any Copper Eskimos during their last years on the Island. Corporal Belcher, who accompanied Klengenbergs to Victoria Island in 1925, reported that a number of the natives were planning to move to Banks, where they understood caribou were plentiful (PAC, NA&NR/NAB 4572). In 1926-27, the Hudson's Bay Company trading vessel *Aklavik* wintered either at Ramsay Island or Banks Island (possibly Cape Kellett). A few Copper Eskimo families were on the Island that winter, and one boy was taken across to Pearce Point on the *Aklavik* the following summer (PAC, NA&NR/NAB 18(3), 5762). The Hudson's Bay Company was granted a post licence for Cape Kellett for 1927-28, and the *Aklavik* probably wintered again at that point. Possibly as many as 28 families from the Prince Albert Sound area spent that winter on Banks Island (PAC, NA&NR/NAB 5764).

A change in policy, made effective in 1927, stipulated that post licences would be issued only for three locations on the Western Arctic Islands: Walker Bay, Cambridge Bay, and King William Island. Accordingly "The Bay" was asked to give up its trading activities at Prince Albert Sound and Cape Kellett, and place a post at Walker Bay to serve the entire region. This was done in 1928, the Company having been given an extension of one year so that the Eskimos would not be cut off unexpectedly (IA&ND/NAB 405-5, 405-1). The Company's Banks Island trade thus seems to have been restricted to the years 1926-28, and in any case no permanent buildings were erected; the trade apparently being conducted from the *Aklavik*. The

Eskimos in question were not keen trappers, and the returns were small. Only 127 pelts were brought back from the 1926-27 voyage (data supplied by Mrs. S. Smith, Librarian, Hudson's Bay Company, Winnipeg, 21 October, 1968), and the following season was probably poorer for trapping.

Until 1928, then, the extension of the trapping frontier was transitory and ephemeral. Two attempts had been made, first by American traders, and then by the Hudson's Bay Company. The American technique was to land imported Alaskan Eskimo trappers with outfits, while the Hudson's Bay Company attempted to establish a trading post dependent on local Copper Eskimo trappers. There were no inherent logistic, economic or sociological impediments to either scheme. Both were cut off from fruition by Dominion Government policy decisions based on the welfare of the native peoples, wildlife and the fur trade in the north.

Banks Island was in a unique position. In terms of the new fur trade economy, it had become a resource-rich area, but due to government policy its lack of a permanent resident population precluded the trading companies from being the agents of its exploitation, as under normal circumstances they would have been. Only the trappers themselves could exploit the new frontier. However, in view of the prevailing conditions in the Western Arctic at the beginning of the 1920s, the trappers perceived neither the need nor the possibility of exercising this option.

We have already described how the events of 40 years – changing demography and ecology, new market situations and resource needs, the introduction of new technologies, equipment and cultural values – had combined to give the Eskimos of the Western Arctic, and particularly those of the Baillie Island district, the advantages and abilities required to successfully reach Banks Island, maintain themselves there and exploit its resources, in terms of the then current opportunities and constraints within the fur economy.

These were necessary but not sufficient conditions for the settlement of the Island. The actual impetus to go seems to have come from the shortage of white foxes on the mainland, and the increased competition from white trappers which developed during the 1920s.

The trappers received encouragement to go to Banks Island from several quarters. Many of those who lived on the coast heard about the Island and its abundance of foxes from Natkusiak and from members of the crew of the *Aklavik*. Ole Andreason, a trader at Atkinson Point who had once travelled on Banks Island with Stefansson, also encouraged them to go. In addition, he, along with Captain Pedersen, was willing to provide the outfits required.

Lennie Inglangasak, David Pektukana and Adam Inoalayak and his son Paul, all from the Baillie district, were the first Eskimos to go to Banks Island on their own, in the autumn of 1928. They went with their families in three schooners, and wintered at the old base camp of the Canadian Arctic Expedition at Mary Sachs, six miles west of the present village at Sachs Harbour. In what was a poor winter on the mainland, they did moderately well, with over 100 foxes each.

The next year, the same men returned to trap. Inoalayak brought his son-in-law, Jim Wolki; Inglangasak brought Alex Stefansson and Pannigabluk (Stefansson's mother), while Pektukana brought a Copper Eskimo by the name of Nakitok, who had been his trapping partner for some years at Pearce Point. In addition, Allen Okpik, from the Delta, had purchased a schooner and outfit from Ole Andreason at Atkinson Point, and he brought his family, including three grown sons, Owen, Colin and Hebert, to Banks Island. The Baillie Islanders got 200 to 500 foxes each, and the Okpik family got over 1,100 between them. Even though the price of white fox had tumbled by 40 per cent that spring, they had gained a fortune. The reputation of the Island was established. The news prompted the equivalent of a gold rush amongst the elite, schooner-owning trappers who could obtain the necessary outfits.

CHAPTER THREE

THE COLONIZATION OF BANKS ISLAND, 1928-1967

Over 40 years have passed since the first Eskimos came to try their luck and skill on the new Island trapping grounds. A few stayed, through prosperous days and lean, raised families, and called the Island their home. More came for a few years only, but for various reasons would not or could not stay. Some are still living, and reside in the Delta, Tuktoyaktuk or Holman. Banksland is an important part of their past: Whether a good memory or a bad one, it is significant of a way of life which for them has now ended. There were also those who died on Banksland, whose forlorn graves on the barren hilltops recall the hardships and privation of earlier days. The present settlement of Sachs Harbour, prosperous, contented and independent, stands today as a monument to all of the pioneer trappers and to their families.

This chapter investigates the changing *genre de vie* on Banks Island over these 40 years. It discusses the abilities of the different groups of settlers to adapt to this new habitat, the manner in which they distributed themselves within it, their technological capacities to exploit their environment, and the economic basis of their existence.

Reviewing the history of the Island's colonization, certain phases of development become evident. Often significant changes coincide — perhaps a sudden influx or emigration of trappers, an important technological change, a downturn in fox prices and the emergence of alternative opportunities. In combination such events initiated new and different regimes of settlement and resource exploitation. There have been two major phases in the colonization of Banks Island: 1928-48 and 1951 to the present. Each of these in turn may be divided into three periods. The analysis of demographic and economic data for these periods tends to confirm the distinctiveness of each.

The first task in this chapter will be to assess the problems of adaptation to the physical environment of Banks Island, which is in many respects harsher than that of the mainland. Next it will be necessary to describe the way of life of the early settlers, and to give an account of the major events of the course of settlement since 1928. These sections will provide a baseline from which change can be measured, as well as a milieu in which they can be understood. The remainder of the chapter can then be devoted to an analysis of the changing patterns of life on Banks Island.

TABLE 3.1

Degree days below 65° F. at selected locations
(approximate figures)

Montreal	9,000
Winnipeg	11,000
Aklavik	18,000
Coppermine	19,500
Holman	20,000
Sachs Harbour	21,500

The Banks Island Environment¹

The climate of the Western Arctic is characterized by long, cold winters, brief, cool summers, and minimal precipitation. Banks Island exhibits these tendencies to the greatest degree, the Mackenzie Delta the least, with the mainland coast and Victoria Island in between. Table 3.1 shows the comparative severity of the climate in terms of heating requirements (degree days below 65° F.).

These figures take no account of wind, which is at least as severe as on the mainland coast, and considerably more so than in the Mackenzie Delta where protection is afforded by the forest. In addition, Sachs Harbour is probably the mildest point on the Island. While the extreme lowest temperature officially recorded there is -54° F., several trappers have given reliable indications that inland temperatures have dropped to at least -60° F., and persisted there for days. Strong winds have been known to accompany these low temperatures.

For the Western Eskimos, wood was an important commodity for both fuel and buildings. Yet Banks Island has no wood, either in timber as in the Mackenzie Delta, or in driftwood as on the beaches of the mainland coast. In one area between Jesse and De Salis Bays there are open seams of low grade coal, but this can not be used feasibly by people camping any distance away from it. Seals and caribou are the chief sources of animal fats on the Island, and hence of fuel, but these fats were required for dogfeed. Thus, although a greater quantity of fuel was required than on the mainland, very little was locally available.

Due to the higher latitude, winter darkness is also more intense and prolonged on the Island than on the mainland. The sun is below the horizon for about 28 days in the Delta, but for about 70 at Sachs Harbour and even more inland and north along the coast. Sachs Harbour, on the south face of a bluff overlooking the sea, receives about five hours of dim twilight on December 21st. Inland, however, even at the same latitude, the length and intensity of the twilight are reputedly much less, (since, in the valleys, the southern horizon is blocked from view), and they continue

¹The chief sources for detailed descriptions of the physical environment of Banks Island and the surrounding areas are Dunbar & Greenaway, 1956; Jenness, 1953; Manning, 1956; and Thorsteinsson and Tozer, 1964. A more general review may be found in Usher, 1966.

TABLE 3.2

Climate data, Sachs Harbour, N.W.T.
(71° 59'N, 125° 15'W - 277' a.s.l.)

Month	Temperatures (F.) ^a				Precipitation ^b (inches)			Winds ^c				days with fog, vis. < 1 km, d	mean cloud amount (tenths covered) ^c
	daily mean	daily maximum	daily minimum	extreme maximum	extreme minimum	rain	snow	total water	prevail- ing dir-	per cent of time	average speed (m.p.h.)		
Jan.	-23.3	-16.1	-30.4	23	-52	0.00	0.8	0.08	N	19	13.2	0.0	4.3
Feb.	-24.2	-18.4	-29.8	21	-54	0.00	0.7	0.07	E	22	11.6	0.4	3.4
Mar.	-19.3	-12.7	-25.7	19	-47	0.00	0.8	0.08	SE	30	10.7	0.8	3.5
Apr.	- 4.8	2.0	-11.7	36	-40	0.00	1.3	0.13	E,SE	24	13.2	3.1	4.4
May	17.2	22.7	11.7	49	-16	T	1.8	0.18	E	25	12.8	6.0	6.6
June	35.8	40.7	30.8	66	7	0.33	0.3	0.36	N,E	20	12.8	10.2	6.3
July	42.3	48.0	36.7	68	25	0.76	0.5	0.81	NW	19	13.1	16.3	7.3
Aug.	39.8	44.8	34.8	66	21	0.74	1.0	0.84	SE	23	13.6	14.1	7.5
Sep.	28.4	32.3	24.5	60	- 4	0.24	3.0	0.54	E	21	14.7	8.8	8.0
Oct.	9.5	15.3	3.7	33	-29	0.01	4.7	0.48	E	32	15.2	4.6	7.1
Nov.	- 9.3	- 3.0	-15.6	22	-36	0.00	1.9	0.19	E	25	13.0	1.6	5.2
Dec.	-17.2	-11.1	-23.2	15	-50	0.00	1.7	0.17	E	23	12.0	3.0	3.7
mean	6.2	12.0	0.4								13.0		5.6
extreme or total				68	-54	2.08	18.5	3.93				68.9	
	^a 1955-66	^b 1955-64	^c 1955-60	^d 1956-60									

Source: Department of Transport, Meteorological Branch, Toronto.

to diminish northwards. Thus the trappers were forced to work under conditions of darkness unknown on the mainland. On the other hand, the period of continuous daylight on Banks Island is much longer, and midnight twilight may be observed within ten days of the equinoxes.

The rain and snowfall regime of Banks Island¹ is similar to that of the mainland. The hard-packed, drifted snow typical of midwinter travelling conditions was familiar to the coastal people, but not to those from the Delta where, in the forest, the snow remains deep and soft.

Ice conditions along the south and west coasts of Banks Island are similar to those encountered on the mainland shore. In both cases, ice develops from shoreward in the fall, and throughout winter cracks running parallel to the coast open periodically, or there may exist a true floe edge five to twenty miles from shore, beyond which there is open water or moving ice. Off the southeast coast, the waters freeze over completely, and there is no barrier to travel between Banks and Victoria Islands. The duration of the winter travel season, both on land and sea is longer on Banks Island than on either western Victoria Island or the mainland.²

In occasional summers, much pack ice remains in Amundsen Gulf, making it difficult or impossible to cross. On the mainland, one can always travel along the coast between Baillie and Herschel for at least short periods during the summer. Thus a new hazard faced the settlers, as they normally had outfits sufficient for one year only. The long voyage over the open sea was for most a new experience. Whaleboats and schooners had been in common use for over a decade, but generally along the coast and well within sight of land.

Except for its extreme northern and southern ends, the Island consists of low, flat or rolling country. It is not at all rugged, and in this sense provides no obstacles to overland travel. In parts however, especially towards the western shore, it is almost featureless. To the casual traveller, there are few well defined landmarks. Because of the similarity to the mainland, the settlers had to familiarize themselves only with a new configuration of recognizable features rather than a completely different landscape.

The faunal resources of the Island also differ from those of the mainland in degree rather than kind. Their harvesting did not require the adoption of a new and different set of resource practices.

Such, then were the main elements of the environment which were new to the settlers, and called for new adaptation and skills. Amongst the mainlanders, those from the Baillie Island district had the fewest and least difficult adjustments to make, since in terms of climate, terrain and resources their territory was the most similar to that of Banks Island. The Delta people, from a much different

¹ About four inches of water annually, divided equally between rain and snow.

² Around Sachs Harbour, overland travel by sled is usually possible from late September to early June, and on the sea from late October to early July.

environment, were required to make more significant adaptations,¹ while those from the Herschel and Tuk areas were between the other two groups in this respect. The Baillie Island group, as coastal people, were the best prepared for life on Banks Island and indeed were the original pioneers. It will become evident in subsequent pages that this group also provided the most successful and the most permanent settlers.

The adaptations required of the Victoria Island people cannot easily be measured on a comparative scale because of significant cultural and economic differences between them and the mainlanders, and because they came to Banks Island at a much later date under different circumstances.

Early life on Banks Island

Schooner travel

Three to seven schooners made the crossing each year, travelling in a convoy. Setting out from Herschel or the Delta, they gathered behind the sandspit at Baillie Island, awaiting fair weather to set out. In later years Cape Dalhousie was sometimes used as the departure point, and voyages were even made directly from Tuktoyaktuk. The convoy headed for Sachs Harbour, either directly or via Nelson Head, since these were the closest landfalls, and Sachs Harbour was the nearest safe haven for ships. Individual boats then proceeded up the west coast or over to the east side as desired or as ice permitted. Similarly, in the spring, it was customary to rendez-vous at Sachs Harbour and then return to the mainland together, striking out for Baillie Island. The journey between these two points, 115 miles in a direct line, could be made in about 20 hours under ideal conditions.

The voyage to Banks Island in a small boat requires navigational skill and good seamanship. On a clear day Nelson Head is visible from the mainland, yet one dare not attempt the crossing without knowledge of compass travel and dead reckoning. Fog and storms can strike suddenly, and ice frequently presents an additional hazard. These dangers were traditionally faced with no other navigational aids than a compass, a watch, and a leaded line. Auxiliary power was generally used on the crossing, particularly as calm conditions were preferred, so the schooner owners also required knowledge of their engines and ingenuity to repair them if necessary.

By the 1930s, schooners were in such widespread use that most men had become familiar with the operation of such vessels. Yet only a few had learned the rudiments of navigation, usually through summer employment on Hudson's Bay or Canalaska vessels. Such men were essential for the crossing to Banksland, and this was an important reason for travelling in convoy.

¹Many Delta people spent the occasional winter on the Coast, and most made trips to Herschel and other coastal points when necessary. It is not meant to imply that the Delta people were entirely lacking in experience of the Barrens, and the requisite skills to live in that environment, but rather that they were the least familiar with it by comparison with other groups. Such experience and skills were only marginally necessary to successful hunting and trapping in the Delta, whereas they were essential on the coast and particularly on Banksland.

The summer voyage back to the mainland was not ordinarily a difficult one, since daylight is continuous at that time. Ice is then only a barrier and a cause of delay, but not a hazard, and indeed its presence can serve to reduce wave size in stormy weather. The outward voyage in September, however, could be dangerous since one might have to contend with both darkness and ice, and strong northwest gales appear with suddenness and severity at this season. Waves can be so high that boats are lost from sight when in their troughs. Most Bankslanders have strong memories of the tension and anxiety of waiting out the darkness while pounding and tossing in a heavy sea, with their families and possessions below, hoping that dawn would bring the sight of a safe harbour. There were many rough crossings, and some near disasters, but it is a tribute to the resourcefulness and skill of the Bankslanders that in 30 years and well over 100 return voyages, never was a person or boat lost at sea.

The schooner owners normally took another family or two with them, or perhaps a young single trapper. Almost anyone who showed interest could arrange to go. If one did not own a schooner, one's father-in-law or brother might, for the schooner owners generally chose close kin to accompany them. The transport of another family assured the owner of sufficient labour to man the vessel, to load and unload, to beach it in the fall, and paint, repair and launch it the next summer. Such labour, in exchange for passage, was generally considered a fair bargain.

Winter camp location

As mentioned, the first group of trappers, coming in 1928, utilized the Canadian Arctic Expedition sod huts and the remnants of the *Mary Sachs* for their winter dwellings. The site was never again used as a winter encampment, presumably because it was discovered that Sachs Harbour, a few miles to the east, provided a much better site.¹

In subsequent years, more and more sites were investigated and used as winter camps. (A list of the camps used and the number of families involved each year is given in Table A.4, while Figures 3.2 to 3.9 show the extent and progress of settlement and trapping between 1928 and 1967). In 1929-30, there were camps at the mouth of the Masik River and at Lennie Harbour in addition to Sachs Harbour. The next year, parties camped as far east as De Salis Bay and as far north as Sea Otter Harbour. "Satsik" ("furthest north") camp was established in 1931, and Jesse Bay in 1935; these representing the extreme limits of settlement on the Island in the modern period. By the close of first phase in 1936, the pattern of settlement had been well established. All but two of the 13 sites ever used for winter camps had been occupied by 1936². Sachs Harbour and Sea Otter were already the dominant sites, as was De Salis Bay to a lesser extent (see Tables 3.8 and 3.9).

¹"Mary Sachs" has remained a favourite spring camp for Sachs Harbour people.

²This refers to the general locations. At some points on the west coast, especially at complex harbours with numerous spits and points, campsites were sometimes shifted a mile or so down the beach or to another embayment.

The dispersal of camps seems to have been based on the recognition by the trappers that any one site could support only limited numbers in terms of food and fur resources. The maximum number of trappers at a single camp during this phase was seven, whilst the mean figure was 3.8 (see Table 3.10). No comprehensive data are available for the contemporary mainland coast trapping camps, but indications are that a similar situation prevailed.

The actual sites were chosen on the basis of providing a safe anchorage, and suitability for hauling up the boats. Of the total of 13 camps, 10 are associated with protective sandspits. This consideration took precedence over others such as the availability of water, general exposure to wind and weather, and suitability for digging ice pits. Over a period of years, other considerations based on experience were used to assess suitable campsites, such as prevailing ice conditions and the proximity of good hunting and trapping grounds, and this led to the dominance of certain sites. This pattern of site selection was not dissimilar to that on the mainland. Indeed most of the camps in the Baillie Island district had not been traditional ones, but were chosen under the exigencies of the fur trade and the schooner. Thus the settlement pattern of Banks Island, in terms of distribution, density and site choice, replicated that of the mainland, both in motivation and result.

The choice of camp by the individual family head was quite flexible in early years. Those who spent several winters on Banks Island between 1928 and 1936 tried at least two or three different locations, and no family was associated exclusively with one camp. Many place names, such as Blue Fox Harbour, Lennie Harbour, and Sea Otter Harbour commemorate the initial arrival of particular families or schooners, but the parties involved frequently camped elsewhere the next year. The factors governing who went where are not easy to ascertain at this distance from the event, but no doubt included autumn weather and ice conditions, who was first to arrive, kinship, personal friendships or enmities, and knowledge or experience of the attributes of the various sites and the productivity of their hinterlands.

Preparing the camp

Upon arrival in early September, the schooners, containing the complete winter's outfits, were unloaded, and winched up on the beach. For their winter dwelling, each family erected a frame tent of lumber and canvas which they had brought with them. These were small, usually 10' x 12' or 12' x 14', and were insulated by a complete covering of moss, then surrounded by ice blocks. Small coal ranges served both heating and cooking requirements. Such a dwelling required about five tons of coal or, perhaps three if used in conjunction with seal blubber. As a ton of coal cost up to \$200 at the time, families naturally tried to conserve their supply as much as possible.

Autumn was a time of preparation for the trapline and winter life, as it still is. Freezeup and snow soon followed the arrival at the camps. Small tents were used until the main dwellings were erected. Subsequently, several loads of moss had to be collected and hauled by dogteam. Sleds, toboggans and harnesses all had to be mended or made anew. Cutting and hauling fresh ice followed, both for water and as

blocks to surround the tents. Such work was seldom completed until the end of October. All members of the family were engaged: the men went seal hunting and did heavy work, the women sewed and cooked and the youths were employed hunting ptarmigan and rabbits nearby.

Seal hunting began immediately upon arrival, close to shore and with the aid of a small dinghy carried on the schooner. Sealing continued during and after freezeup at the floe edge, where a small, open, skin covered boat in the shape of a umiak, large enough for one person, was used for retrieving. Each man attempted to get about 20 or 30 seals, sufficient to last into February, before the trapping season opened, as seal hunting during dark days is difficult and brings small yields. With the coming of cold weather in October or November, the dogs were fed on cooked feed; a mixture of cornmeal or oatmeal and seal meat. This practice had been adopted by trappers on the mainland some time after the turn of the century, and greatly reduced both the amount of meat required for winter feed, and the total weight of feed for long sled trips inland.

One had also to obtain a good supply of caribou for human consumption. Accordingly, in late September or October when the snow lay sufficiently deep for overland travel, hunting forays were made by dogteam. Sometimes the hunters also fished through the ice on the lakes during these trips.

Trapping

Most trappers set out with six or seven dogs, a toboggan or basket sled and about 100 traps, although a few had 200 or 300. Many, coming to the Island for the first time, bought only 50 or 75 traps. The trappers initially ran their lines along the coast, as it was the easiest route to follow. By 1936, the major river valleys had been discovered and utilized, (particularly the Masik, the Kellett, the Big and the Storkerson), and a few trappers had experimented with overland routes and "portages" between the major valleys (See Figure 3.3). Trap lines were seldom more than 50 or 60 miles long, and some trappers maintained two or even three lines at once. Trapping trips were about a week in length, although some men with longer lines went out for 10 or 12 days. Those who maintained short lines, especially in the first two or three winters, required only three or four nights to visit each line. Apparently the time spent in camp between trips was roughly equivalent to the length of the trips themselves, so that the average trapper spent about half of the season actually on the trail. Thus in a 20 week season, most trappers made seven to ten trips. Most of the line was set on the first trip, and extended on subsequent trips. On occasion it was shifted in mid season to a new location. It was the practice to pull the line completely on the last trip and bring the traps back to be put on the boat, since the trappers frequently did not or could not return to the same camps each year.

The men normally trapped in pairs or threes, although some went alone. Right from the beginning of settlement (with one or two exceptions), only the men went on the trap line; the women and children stayed at home. This practice had already been in force on the mainland coast.

Snow houses were invariably used on the trail, for overnight camping. The snow house was, even in aboriginal times, rarely used by the Eskimos of the Western Arctic, and the art of its construction and use was never as highly developed as it was in more easterly regions.¹ On Banks Island they sufficed as overnight shelters for two men, who could erect one together in an hour or so. These snow houses were frequently reused on subsequent trips throughout the winter.

The trapping season for white fox on the Arctic Coast and Islands extended from the 16th of November to the 30th of March throughout most of the first phase of settlement on Banks Island (See Table A.2). There was little variation in the routine of life during these months, and trapping was by far the most important activity throughout. Before Christmas there was a secondary emphasis on caribou hunting. By the end of January the sun had returned, and as dogfeed would be running short, the trappers took the opportunity to hunt seals when ice conditions were suitable. Day or overnight trips were made to open water when home from the trapline, in hopes of obtaining two or three seals to tide them through the next trapping expedition. During March trapping was the sole preoccupation.

Spring life

Trapping ended on March 30th by regulation, but at least four months remained until the boats could cross to the mainland. These were pleasant months; the hard work of trapping was over and the men could relax for a while at home, and with the milder weather and long days, the women and children could spend more time outdoors. Hunting could be indulged in for pleasure as much as necessity, and the mild weather and long days allowed the whole family to travel without discomfort.

Easter came soon after trapping, and the families from different camps congregated at Sachs Harbour or Sea Otter for a few days to celebrate this occasion, which for them was perhaps more social than religious. Upon returning to the separate camps, the men went seal and caribou hunting, while the women prepared the fox pelts for market. The chore of cooking dogfeed ceased in April, and the dogs reverted to a straight seal diet. After the geese arrived in the third or fourth week of May, many families went for a few days to the nesting grounds (discovered in 1932), to obtain both geese and eggs. Some families also went to various inland lakes in May to fish through the ice for char and trout. By the end of June inland travel becomes impossible, so sufficient stocks of caribou, goose and fish must have been put up to dry to see the people through until they could reach the mainland, usually in early August. On the departure of the snow, families moved out of their winter houses into lighter tents.

¹ As a result the snowhouses they did build were crude and uncomfortable. They had no sleeping platforms, even though it was recognized that the floor was the coldest part of the structure. The Bankslanders always used primus stoves inside their snow houses for heat and cooking, although when weather permitted they cooked their dog pots outdoors in order not to heat up the house too much. Still, there is little wonder that the interior soon became rather damp, and that after one or two nights the interior walls were completely iced over and impervious to air. Some trappers put up canvas next to the ceiling of the snow house to reduce the dripping.

July was devoted chiefly to working on the schooners. They were caulked and perhaps painted, then winched off the beach into the shore lead. After the engines were put into working order, the boats were loaded. Everything was put on board: dogs, travelling and camping equipment, traps, meat, the winter's fox catch, even the canvas and lumber from the tents, because there was no guarantee that the party would return to the same spot the next year. Now they had only to wait for the ice to disperse and allow them unhindered passage to the mainland shore.

Nothing remained but a pile of cans and other refuse, perhaps an odd item whose useful life had ended, such as a wooden washing machine, a cast iron stove or a sewing machine; a few broken boards and a rectangle of sod marking the site of the winter dwellings. Such forsaken remnants of human habitation are still found at Blue Fox, Sea Otter, Satsik and the other camps.

Trading and outfitting

Herschel Island was the chief centre of supply and exchange for the Western Arctic white fox trade in the early 1930s. At Herschel there was intense competition between the Hudson's Bay Company and Pedersen's Canalaska Company.

Most of the Bankslanders favoured Pedersen, who had encouraged and outfitted many of them to go in the first place. Pedersen was personally held in high regard in the region, and his merchandise was renowned both for its variety and quality. Yet "The Bay" also took its share of the Bankslanders' furs. When large quantities of furs were offered by an individual, it was common for both "The Bay" and Pedersen to submit sealed bids for them, after inspection. The opening of these bids by a neutral third party was the occasion of considerable excitement, especially when amounts of 30 or 40 thousand dollars were involved. The two companies competed keenly for white fox, but Pedersen took most of the trade in polar bear skins, as the market for them was then much stronger in the United States than in Canada.

The Bankslanders' trade at Baillie Island was usually confined to immediate needs on the south bound voyage, or to last minute requirements before returning to Banksland. The only post at Baillie was operated by the Hudson's Bay Company. E.W. Wyant, who ran a post at Horton River until 1931, also competed for the regional fur catch, and some of the first Bankslanders (who were related to him through marriage) traded with him. As a rule however, the Bankslanders did not find it to their advantage to trade at Baillie, since fur prices were lower and commodity costs higher there than at Herschel. Aklavik was at first not important to most Bankslanders as a trading place, although by the end of the 1930s it had replaced Herschel in this function.

The Bankslanders always prepared their furs with considerable care, and accordingly tended to receive prices well above the average tariff. Their yearly outfits were also more costly than the average, amounting to a minimum of \$3,000 to \$5,000 per family. Coal and gasoline were a major expense, as were capital goods such as rifles, traps, canvas, ammunition and dog feed. The annual purchase of groceries included not only such staples as flour, lard, sugar and tea, but tinned

fruits and vegetables as well. Moreover, the Bankslanders in most years could afford additional durable goods such as washing machines, sewing machines, phonographs, radios, watches, binoculars and cameras. A few of the best trappers were also able to afford new schooners, costing \$10,000 to \$15,000. Usually the trappers required credit for part of their outfits, but in good years they could purchase their entire outfit on the basis of the previous year's catch and still have money left over. Some trappers kept such surplus monies in bank accounts in Edmonton or Vancouver through "The Bay" or Captain Pedersen. Very little cash circulated locally; most transactions being on paper or in kind.

Summer on the mainland

The brief visit to the mainland was hectic and exciting for summer was far more than a time for trade and resupply. It was also the occasion for reunion with families, relatives and friends; for the exchange of news, stories and experiences, and for enjoying the summer flowering of activity that characterized Herschel Island and Aklavik in those days. Boats were everywhere. Schooners came in from all parts of the Arctic Coast, sternwheelers came down the Mackenzie and steamers came round from the Pacific. On these boats were people of all races, nationalities and occupations, bringing the latest inventions and merchandise from San Francisco, Vancouver and Edmonton, as well as news and mail from around the world. There were new things to see, like cows and airplanes, and other places such as Shingle Point and Tuktoyaktuk to visit. Little work was necessary, as the Bankslanders lived on their boats and the dogs were put ashore and fed on fish and scraps. There was plenty of time for such popular pastimes as dances and games of chance. The Bankslanders soon earned a reputation as top trappers, shrewd traders and big spenders. This richness of life contrasted strongly with the long winter's isolation and hardship on Banks Island, where feelings of loneliness and monotony sometimes descended on the camps and hung there for days or weeks.

As September approached, the Bankslanders regrouped for the outward voyage. Some were absent, either because they did not wish to return or because they had done poorly and could not get outfitted. But there were usually some new faces; people who felt they could make a better living on the Island, or who simply wished to join their relatives. And as always, there were the real Bankslanders, that core of perhaps a dozen families who returned year after year. Together they gathered behind the sandspit at Baillie Island, sometimes stopping at the post to pick up a last sack of flour or box of ammunition, or some other article remembered at the last, and waited for fair weather so they might set out for the great headland which beckoned them from across the gulf.

Such was the pattern and cycle of the Bankslander's life in the early days, with some variations from year to year and from place to place on the Island. In the main, the Island provided an abundance of fur and food to the settlers, although at times the people suffered from prolonged hunger and cold.

The general sequence of settlement, 1928-67

The first 20 years of settlement constituted a major historical phase, and may be divided into three periods: 1928-36, 1937-41, and 1942-48, each separated from

the other, as it happens, by years in which no one reached Banks Island due to severe summer ice conditions. During the initial period of colonization, Banks Island was the frontier of Western Arctic Eskimo settlement. Everyone was new and the success of each man was a test of his suitability and adaptability to the new conditions. Within these seven years, the basic pattern of development was set. In the years 1937-41, the more established trappers experienced great success and prosperity. These trappers had consolidated both territory and property for their operations, and this period was one of florescence in both the material wellbeing and social distinctiveness of the Bankslanders. During the third period, a decline in prosperity occurred due both to internal and external forces, and the Island was ultimately abandoned.

The second major phase of settlement (1951-67) occurred in a rather different economic and social context from the first. The white fox trade was in decline all across the Arctic, and regional economic conditions were depressed. The Federal Government was beginning to take a much more active interest in Eskimo affairs, and the fur trade was no longer the major determinant of population distribution and economic activity. Three different periods may be identified during this second phase: 1951-55, 1955-61, and 1961 to 1967. The first was in many respects similar to the pre-1948 pattern, both in the families involved and the way of life. The second occurred during the construction of the DEWline on the mainland and the establishment of a Federal Government presence at Sachs Harbour. With construction providing an important alternative to trapping, major changes in the composition of the population occurred, with some longstanding residents departing, and several new young trappers arriving. The final period is marked by the abandonment of camp life on the Island and the establishment of a permanent Eskimo settlement at Sachs Harbour, while the population itself stabilized to an unprecedented degree. The following two sections provide a more detailed account of these events.

The first phase, 1928-48: Banksland as the culmination of the regional way of life

1928-36

During the first seven winters there was a great influx of trappers, almost all from the mainland. Of a total of 95 adult male trappers who went to Banks Island after 1928, 41 did so before 1936. Thus almost 40 per cent of the Western Arctic trappers went to Banks Island for at least one season during this period. Of the 50 or so native owned schooners operating in the Western Arctic at this time, about 20 eventually made the crossing: five from the Delta and 15 from the coast. Probably 13 of the 20 came during the first seven years of settlement.

There were two peak years of fox abundance during the first seven years of settlement, and those men who had trapped on the Island for both of them¹ made large amounts of money. For example, two of the best trappers obtained, in

¹ In 1933-34 some Bankslanders were forced to winter on north-western Victoria Island due to heavy ice which prevented their return to Banks Island. The peak abundance of foxes was widespread that year, and the trappers fared as well as they would have on Banksland itself.

partnership, a 57 foot schooner which they named the *North Star*. She was one of the largest schooners ever brought into the country, and certainly the finest, and was for 26 years the “flagship” of the Banksland fleet. Another trapper took his family to spend the winter of 1935-36 in San Francisco and Vancouver. That he was able to live an entire year outside without overdrawing his credit is indicative of the wealth that some of the Banksland trappers were accumulating at this time.

There was much experimentation with different campsites on the Island during this period, and people seldom wintered in the same place twice. Yet at Sachs Harbour, work on an ice cellar to the east of the main lagoon was begun in 1936, signifying recognition of at least a degree of permanence by its residents. Also, by the end of the first period, a few men had gained sufficient knowledge and confidence to run overland traplines.

Much had been accomplished during the first phase of settlement. The incorporation of Banks Island into the Western Arctic fur trade territory was no longer in doubt. This had been accomplished entirely by Eskimo trappers, although they had certainly had the encouragement and backing of the traders. These Eskimos had familiarized themselves with the topography and resources of the southern and western portions of an island almost the size of New Brunswick. They had established a self-supporting enterprise which in seven years produced over \$300,000 worth of fur.

The colonization of Banks Island was the last significant extension of the fur trade in the Western Arctic. Its significance to the regional economy lay in the accumulation of considerable wealth by a few men through large individual catches, rather than in its total contribution, since the number of trappers on Banksland in any one year was small. The mainland coast, although declining in productivity, was still an important area, and the Banksland catches ordinarily amounted to less than 20 per cent of the catch between Herschel Island and Pearce Point.

1937-41

Heavy ice in Amundsen Gulf forced the Bankslanders to winter near Cape Parry, on the mainland, in 1936-37. Few furs were obtained, and many Bankslanders found themselves heavily in debt for the first time. This was especially true of the less able trappers and those who had only been on the Island during poor seasons. With the continuing decline in fur prices, the traders were not prepared to extend large debts to the poorer risks. Pederson, who already had over \$20,000 owing to him from the Bankslanders, advanced them an additional \$20,000 or \$25,000 for the 1937-38 season. His partners in New York had recommended against this, but Pederson expected a peak fur year and a return of 3,000-4,000 pelts from the Island (PAC, NA&NR/NAB 5765(2)). Unfortunately, it proved a mediocre season and less than 1,700 foxes were taken, leaving the Bankslanders even further in debt.

Their financial difficulties were compounded by the fact that Pederson sold out to the Hudson's Bay Company in 1938. “The Bay” refused to outfit them in view of the general economic situation. Although a few of the trappers were not badly off, most simply did not have the resources to return.

Those trappers who did return were indeed fortunate, for the long awaited peak in the cycle produced a harvest of about 6,500 foxes. The leading trapper and his wife together obtained 1,300, a record number which has never been equalled in Canada, and probably not in the world. This bumper harvest, however, coincided with a nadir in the market price. For example the 1,300 foxes, which brought about \$15,000 in 1939, would have fetched \$100,000 ten years previously. Still, earnings were sufficient for most families to clear long standing debts and even have some credit left.

The Bankslanders enjoyed a second peak harvest of almost 5,500 foxes in 1940-41, and furthermore enjoyed the advantages of a rising market. Good pelts were again bringing well over \$20.00.

The two big seasons coming close together had brought considerable wealth to most of the Bankslanders. During the 1937-41 period, several young men began trapping on the Island who later became part of the core of Banksland families. Embarking on their trapping careers in these good years, they were able to acquire rapidly a large stock of essential capital goods, even including schooners. This wealth was an important factor in their subsequent success, and their ability to return to the Island year after year.

Less beneficially, the recent successes led to overconfidence in the future, and to a propensity for free spending. The winter of 1941-42 is an example. An unusually early freeze up that fall caught the Bankslanders still in Aklavik, to where they had brought their trade since Pedersen's departure. They were unconcerned since they had more than enough credit for their immediate needs. The year in the Delta was regarded as an unexpected but welcome extension of the too brief summer holiday, although in spring they joined the Delta people in ratting. Yet even with the recent increase in pelt prices the most experienced Delta trappers made less than \$5,000 on rats and the Bankslanders did not do as well. Accounts of Delta life that winter indicate the Bankslanders were spending money rather faster than they were making it. Gambling increased in the Delta during the early 1940s (R.C.M.P., 1943;51, IA&ND/NAB 1000/119(1A)). Surplus money was available for the first time in over a decade, because fur income had risen considerably faster than the cost of living. Some of the Bankslanders had credit in the tens of thousand of dollars, and they were not only in a position to gamble for high stakes, but also to purchase large outfits, luxury items and gifts, to stay in the Aklavik Hotel, and generally to flourish their wealth.

1942-48

The period 1942-48 began auspiciously, with moderate harvests and high prices bringing good incomes. These high prices encouraged white fox trapping, and attracted many newcomers from Tuktoyaktuk and the Delta to Banks Island. In addition, some of the oldtimers who had not been to the Island since the early thirties returned for a year or two. There were usually 20 or 25 trappers on the Island, many more than at any time before or since. Moreover, fewer sites were used for winter camps, and these became more crowded.

Wartime prosperity was accompanied by greatly enlarged credit extensions and heavy spending. \$20,000 outfits were purchased, and some men contracted debts of over \$10,000. Such well being proved short lived. In 1944, freeze-up occurred while the Bankslanders were en route home, and they had to winter at the Booth Islands. Most men got 10 or 20 foxes, with even the high man taking only about 30. They were thus unable to take advantage of the high fox prices in 1945.

During the next few years, prices fell by 75 per cent, and the trappers went further and further in debt. Severe ice conditions continued to plague the Bankslanders in most years throughout the 1940s. In the summer of 1946 three of the boats at Sea Otter failed to reach the mainland.

The winter of 1946-47 produced the only outstanding fox harvest of the 1942-48 period, but prices were already down to about \$13.00. In 1947 the boats had only just returned to Sachs Harbour when freeze-up occurred, and 25 trappers were forced to winter at that site.

The postwar depression in the Arctic, which was probably at its worst between 1948 and 1951, has already been described. By 1948 the Bankslanders were collectively in debt to one trader alone for over \$50,000, with individuals owing up to \$6,000 and \$8,000. These debts ultimately had to be written off. The previous winter's harvest had been poor, and fur prices continued to drop. Commodity prices, and particularly food prices, were soaring, and the traders were not prepared to advance new outfits of the size required for a Banksland winter. On the mainland, conditions were even worse. The Delta was in the grip of a flu epidemic, to which several Bankslanders also fell victim, and which in many cases was followed by complications such as pneumonia and tuberculosis. These circumstances, to say nothing of the very early freeze-up in 1948, made it impossible for the Bankslanders to return to the Island.

For three years the Bankslanders stayed on the mainland, some living at Tuk and some at Aklavik. A few found wage employment, but the majority trapped marten and muskrat. These fared adequately by mainland standards, but earned only a fraction of their former incomes on Banks Island. The mainlanders, particularly the Delta people, resented the presence of the Bankslanders. A longstanding envy of the affluent Bankslanders was now compounded by resentment of their encroachment on mainland territory and resources which were already overtaxed. When registered traplines were introduced to the Delta in 1948, many of the Bankslanders did not qualify. Tuktoyaktuk trappers were also contemplating a group trapping area, mainly in response to the Delta restrictions but which would also exclude the Bankslanders. Meanwhile many of the schooners were falling into disrepair, and by 1950 probably only four or five were fit to make the crossing to Banksland.

The second phase, 1951-67: Banksland as the antithesis of the regional way of life

1951-55

Unwelcome on the mainland, the Bankslanders were yet unable to return to their home. The Northern Administration and Lands Branch became anxious to see

the Bankslanders return to the Island, and indeed would have preferred a trading post established there to encourage more permanent settlement and less dependence on the mainland.¹ The Cold War also made strategic considerations important. Canada had both to ensure the loyalty of its northern peoples in the event of outright warfare in the Polar Basin, and to assert its sovereignty over the Arctic Islands in the face of increased American strategic interest in them. The resettlement of Banksland on a more permanent basis could usefully serve both ends.

The Hudson's Bay Company could not be persuaded to establish a post on Banks Island, because they believed the Bankslanders would continue to visit the mainland in summer in any event. The Company did undertake to outfit some Bankslanders in view of the recovery in the fox market in 1951. Nine trappers, most of whom had resources enough to cover most of their outfits, were prepared to try again. The Bay at Tuktoyaktuk and a free trader in the Delta extended over \$6,000 in credit, about \$1,000 of which was guaranteed by the Government. The Sub-district Administrator at Aklavik undertook to visit the Island in the spring to ensure that the families were healthy and adequately supplied. In September 1951, two schooners eased out of the harbour at Tuktoyaktuk amid farewells from shore, heading back to the camps that for three unhappy years had lain still and empty.

Foxes were abundant on Banks Island in the winter of 1951-52, and the expedition was a success. All advances were repaid, and little or no credit was required for the next season. The government had established the Eskimo Loan Fund that year, and the "Banksland Project", as the administration termed it, benefited greatly from this source of capital. Fur prices showed a slight improvement, but the traders were still cautious with credit extensions. The loan fund supplied the extra margin necessary for success. It was especially important to those who, on the basis of the initial success of the first two years, were encouraged to return themselves. Table 3.3 indicates the critical role of the Eskimo Loan Fund in re-establishing the Banksland group during the first four years. Not only was the loan programme a success in terms of the resettlement, but every loan was repaid in full, all but one within a year.

1954-55 was again a peak fox year, in which fully 20 trappers shared. Yet throughout the period 1951-55, wolves were present on the Island in unusual abundance, and regularly destroyed about 25 per cent of trapped foxes before retrieval (McEwen, 1956). This led to a government sponsored wolf poisoning programme which soon brought this situation under control.

1955 to the present

The summer of 1955 brought important changes to Banks Island and to the nearby mainland. The Department of Transport established a Meteorological Station at Sachs Harbour, and the R.C.M.P., who had established a detachment two years before, expanded their facilities and hired an Eskimo special constable from the Delta. On the mainland, construction of the Distant Early Warning line got under

¹This desire was not unanimous. At least one official felt Banks Island should become a game preserve closed even to Eskimos (IA&ND/NAB 1000/176(2)).

TABLE 3.3

Financing of the "Banksland Project", 1951-1955

Year	Number of trappers requiring assistance	Eskimo Loan Fund (\$)	Credit from traders (\$)	Total (\$)
1951-52	9	310.00 ^a	6,625.00	6,935.00
1952-53	5	1,035.00	no data	?
1953-54	6	1,650.00	3,800.00	5,450.00
1954-55	13	4,384.09	8,000.00	12,384.09

^aFunds from Northern Administration and Lands Branch. In addition, \$700 of the credit from traders was guaranteed by the Branch.

Source: IA&ND/NAB 251-2, 251-2-8, 1000/176.

way. For the still depressed communities on the mainland, jobs were suddenly available in abundance. Some Bankslanders, knowing that the past winter's abundant fox crop would be followed by two or three lean years, chose wage employment on the DEWline. For others, the rough crossing in the summer of 1955 was the last their battered schooners and worn out engines could take. Unable to replace their boats, these people had no choice but to remain on the mainland. A greatly reduced band of trappers went to Banksland in the fall of 1955, and still fewer returned the next year.

DEWline construction ended in 1957, and this reduced the number of jobs locally available to Eskimos. Some younger men who had been first class trappers in their own right on the mainland coast, came to the Island in hopes of making a better living. In addition several Copper Eskimo families from Minto Inlet moved first to De Salis Bay and later to Sachs Harbour to trap. Many of these people have remained, and today form an important and productive part of the community.

Until the 1950s, Banks Island had been remarkable for its isolation. No commercial venture had been made by white trappers since 1917¹ or by white traders since 1927. No scientific expeditions, government or private, visited the Island after Stefansson's departure in 1917 until 1938, and none made contact with the Eskimos until Manning's expedition of 1952 (Manning, 1953)². Other than an R.C.M.P. patrol from the *St. Roch* at Walker Bay in 1941, the visit by the Sub-district Administrator and his party in 1952 was the first official attempt by the government to investigate conditions among the Eskimos of Banks Island. The otherwise intrepid missionaries of both Roman Catholic and Anglican faiths made

¹Two white trappers from the mainland made an illegal and abortive attempt to trap on Banks Island in the winter of 1931-32 (see R.C.M.P., 1932 and PAC, NA&NR/NAB/7210).

²See Manning, 1956, for a list of previous expeditions.

no attempt to establish missions on the Island until 1962. Although airplanes had been flying to the Arctic Coast since the late 1920s, the first commercial flight to Banks Island, so far as is known, was in the spring of 1948 on a charter arranged by the Eskimos themselves through the radio facilities at Holman Island.¹ The first radio link between the Island and the mainland came with the establishment of the R.C.M.P. detachment at Sachs Harbour in 1953. Commercial shipping and air services have since been established.

All these events have had a profound effect on the distribution of settlement on Banks Island. Until 1953 there were only three or four permanent buildings on the Island, the oldest being the cabin erected by Fred Carpenter at Sachs Harbour in the late 1930s. Most people lived in tents which were taken down each summer. The only other permanent facilities were the ice cellars at Sachs (started in 1936) and Sea Otter (dug in 1946).

Camp life declined rapidly in the late 1950s, and in the fall of 1960 almost all the families who had traditionally camped at Sea Otter, Lennie Harbour and De Salis Bay moved into Sachs Harbour. No one has wintered elsewhere since 1961. The Bankslanders also ceased their summer schooner journeys to the mainland. The *Fox* made her last voyage in 1960, the *North Star* in 1961. People began erecting permanent wooden dwellings, and the pattern of traplines also became more established, as there was no longer a question of where one might be camped next year. Sachs Harbour was no longer a winter camp but a permanent village.

Summary and analysis of change

Relative success of the immigrants

Between 1928 and 1967, 95 adult men have trapped full-time for at least one season on Banks Island.² In the following discussion, we will examine the success and failure of these immigrants over the six historical periods, particularly with regard to such characteristics as ethnicity and previous experience. The ethnic origin³, birthplace and place of residence prior to emigration is given in Table 3.4.

Almost half of the 95 were of Alaskan lineage, with the rest being of Mackenzie Eskimo, mixed blood and Copper Eskimo stock in approximately equal proportions. Very few of the immigrants were Alaskan by birth, however. Over half were born in the Mackenzie Delta or in the Baillie Island district.

The most important criterion for assessing relative success in adjustment to Banks Island, however, is the trapper's place of residence during most of his life prior to emigration (hereafter referred to as place of origin). We have already noted

¹ The first aircraft landing on Banks Island was made by Donnelly, at De Salis Bay in 1943 to establish an astronomic control position (Donnelly, 1943).

² In the following discussion, including the accompanying tables and figures, numbers refer to full-time trappers only, and do not include their dependents unless otherwise specified.

³ The concept of ethnicity is used here to distinguish between the various Eskimo groups. Ethnic breakdown is approximate, and is based on the chief lineage of each person, as of course intermarriage occurred between all groups.

TABLE 3.4

Ethnic origin, birthplace and place of origin of all trappers
wintering on Banks Island, 1928-67.

a. Ethnic origin (approximate breakdown)

Alaskan Eskimo	45
Mackenzie Eskimo	20
Mixed blood ^a	15
Copper Eskimo	14
Indian	1
Total	95

^aChiefly those descended from a union of an American whaler with a Mackenzie or immigrant Alaskan Eskimo woman.

b. Region of birth

Alaska	11
Mackenzie Delta	26
Herschel — Tuktoyaktuk	10
Baillie Island district	25
Victoria Island	14
Banks Island	5
Unknown	4
Total	95

c. Area of residence prior to emigration to Banks Island

Area	Number of emigrants	Total years resided on Banks Island	Mean number of years resided on Banks Island
Mackenzie Delta	28	109	3.9
Herschel-Tuktoyaktuk	9	42	4.7
Baillie Island district	36	220	6.1
Victoria Island	11	47	4.3
Banks Island ^b	8	63	7.9
Unknown	3	3	1.0
Total	95	484	5.1

^bRefers to individuals raised on Banks Island before becoming independent adult trappers.

d. Present residence (1 January, 1967)

Banks Island	17
Inuvik	17
Other Mackenzie Delta locations	4
Tuktoyaktuk	16
Victoria Island and east	9
DEWline and other	4
Deceased	27
Total	95

Source: Field investigations, Table A.3.

that trapping ability and motivation were not equally distributed amongst the various Eskimo groups. The orientation of any individual toward trapping is most likely to be explained by that of the group in which he was raised and began his livelihood. In the 1920s there were three distinct Eskimo groups on the mainland, all of which were territorially distinct, so that the area in which a trapper was raised prior to emigrating to Banks Island is indicative of his orientation to trapping.

Most immigrants to Banks Island were from the Baillie Island district and the Delta. Both were strongly oriented to commercial trapping, the former for white fox and the latter for muskrat and mink. The small number of immigrants from the Herschel-Tuktoyaktuk area reflects the relatively weak orientation of this group to trapping, as well as their lack of schooners. Most of the immigrants from that area came aboard Delta or Coast schooners. The immigration of Copper Eskimos, and the coming of age of trappers raised on Banks Island, is associated chiefly with the second phase of settlement, so initially we may contrast the fates of the Delta and Coast (Baillie Island district) settlers.

More than half of the Baillie trappers who came to Banksland between 1928 and 1948 remained through the entire phase, while fully 13 of the 15 Delta trappers left the Island before 1948 (See Table 3.5). Moreover, individual Coast trappers tended to remain on the Island longer. For the years 1928-67, the mean length of residence for the Coast trappers was 6.1 years as opposed to 3.9 for those from the Delta. Over half of the Delta trappers remained on Banks for one year only, while the corresponding rate for the Coast group was less than 15 per cent. The greater proportion of the Coast group remained from three to five years, and almost 40 per cent resided on the Island for six or more years (see Table 3.6). Undoubtedly then, the Delta people were not as successful as the Coast people in colonizing the Island during the early years.

There are several explanations for this. The coast people were more familiar with the physical environment of Banks Island, and they were more experienced in trapping white fox. The choice of camp location was an additional factor in explaining the differential success of the two groups.

Most of the camps were composed either of Delta or of Coast people, and were seldom mixed. The initial settlement pattern was in some measure a chance occurrence. In 1928-29 the trappers at Mary Sachs were from the coast, but in the following year the closest location, Sachs Harbour, was occupied by a Delta group. In 1930-31 the Coast people camped at various points on the west side of the Island, while a Delta fleet went to De Salis Bay. During the next three winters only Coast trappers went to the Island, and occupied west coast camps only. In 1934-35 there was an almost complete change of personnel, when people from the Delta camped on both the east and west coasts. After 1935 however, when the Coast trappers again predominated on the Island and began to return with greater frequency to the same sites, they monopolized the west coast camps through *de facto* continuous occupation. Delta groups on the other hand tended to visit the Island less regularly, and soon found that the only "open" sites were on the east coast. No overt conflict played a role in this pattern; the restriction was self imposed. Once it was known that one group camped at a particular location, it was unthinkable for another group to encroach on their camp or its hinterland.

TABLE 3.5

In-migration/out-migration, Banks Island, by place of origin

a. by historical period

Years	Place of Origin						Total
	Mackenzie Delta	Herschel- Tuktoyaktuk	Baillie I. district	Victoria I.	Banks I.	Unknown	
1928-36	11/6	5/3	20/9	2/2	0/0	3/3	41/23
1937-41	1/0	2/0	4/2	0/0	1/0	0/0	8/2
1942-48	5/7	1/4	11/15	3/1	0/0	0/0	20/27
1951-55	2/3	0/0	0/7	3/1	4/1	0/0	9/12
1955-61	5/3	1/1	1/0	3/3	0/0	0/0	10/7
1961-67	4/3	0/0	0/1	0/1	3/4	0/0	7/9
Totals	28/22	9/8	36/34	11/8	8/5	3/3	95/80
Remaining on Banks Island, Jan. 1, 1967	6	1	2	3	3	0	15

b. by historical phase

1928-48	17/13	8/4	35/16	5/2	1/0	3/3	69/38
1951-67	11/7	1/0	1/0	6/5	7/5	0/0	26/17

Source: field investigations.

TABLE 3.6

Length of residence on Banks Island by place of origin

Place of Origin	total years resided on Banks Island			
	1-2	3-5	6-10	11 and over
Mackenzie Delta	16	5	4	3
Herschel-Tuktoyaktuk	4	2	2	1
Baillie I. district	9	13	8	6
Victoria Island	6	2	1	2
Banks Island	3	0	1	4
Unknown	3	0	0	0
Total	41	22	16	16

Source: Table A.3.

The east side is a poorer environment for trapping than is the west, due to a shortage of both fur and game. Most instances of real hardship have been associated with the east side camps. The Coast people gained their locational advantage between 1930 and 1934, when only one Delta group came to the Island. Despite the temporary return of the Delta people in 1934-35, they had lost access to the most productive hinterlands on the Island. Thereafter until the demise of camp life, not only incongruity of experience but also the necessity of inferior location militated against successful colonization by Delta trappers.

During the second phase of settlement, after 1951, a different pattern emerged, which must be viewed in the context of the changing conditions in the Western Arctic. Also important is the fact that the Bankslanders were a distinct group both in their own eyes and those of others, rather than being members of other mainland groups.

The people who returned to Banks Island in the early 1950s were all previous residents. Almost all were of coastal origin or had been raised on Banks Island.

Many more families of coastal origin, including some of the original settlers, had been unable or unwilling to return to their former home, and several other old timers quit between 1952 and 1955. Many had simply grown old, and even in the early 1950s, Banks Island was no place for the old, the sick or the feeble. Even in the best of years the physical conditions of life on the Island were harsh. The strict isolation meant that to contract a serious illness or accident was to suffer and waste away, helpless in the face of death. With the small nuclear family as the ideal unit of production, old people were simply a burden on the trapping camps. When a man came to the end of his trapping career, or his wife or family became too sickly, he stayed behind on the mainland where life was easier and more secure.

The level of immigration was considerably lower during the second phase than in the first, and its sources were also different. The old Coast community was gone, and so could no longer provide a steady stream of able men. In addition, very few of the sons of these families, now living in Tuktoyaktuk, became keen or able trappers. With father and son both working on the DEWline there was neither the time nor the inclination to learn. Although most of the present Bankslanders have their kin folk in Tuktoyaktuk, only one new immigrant has come from that community since 1951.

Only eight of those raised on Banksland have so far attempted to trap there, and of these only three remain as full time trappers.

According to the 1967 Eskimo Disc List for the W3 (Western Arctic) District, there were 18 males and 15 females still alive who were born on Banks Island between 1928 and 1948. In addition there were perhaps as many children of Banksland families who were born on the mainland, either in summer or during the occasional winter when the family was not on the Island. The actual number is difficult to estimate, due partly to the frequency of movement back and forth, and to adoptions. Moreover during the 1930s and 1940s, many and probably most children attended the mission schools for at least a few years. Later on the children spent the greater portion of their youth in school, especially at Aklavik. Children attending the residential schools were away from home ten months of the year, and

if they lived any distance away, did not go home at all. Many of the Banksland children born in the early 1940s never saw their homes for years at a time, and saw their parents only briefly in the summers when they came to Aklavik. There was little opportunity, therefore, for these children to learn the way of life of a trapper, and in any case, having grown up in a completely different physical and social environment, Banks Island was not really their home and it offered little if any attraction to them when they left school. Those born in the 1940s and leaving school in the late fifties or early sixties quite naturally looked to wage employment for their livelihood rather than trapping.

The chief sources of recent immigration to Banks Island have been the Mackenzie Delta and Victoria Island. Many of the Delta immigrants had spent several years in wage employment during the construction of Inuvik or the DEWline, and were attempting a return to the trapping life. These were poorly equipped and often unskilled, and seven of the eleven left after their first season. Most of the Copper Eskimos came to Banks Island in the late 1950s after a series of bad winters in Minto Inlet. This renewed immigration gave rise to concern among the older residents that the Island might become over-crowded and overexploited, and it ultimately led to the establishment of Banks Island as a registered trapping area.

Both gross and net movement of peoples were considerably less after 1951 (Figure 3.1). The period 1951-55 was one of net out-migration, for reasons already discussed. 1955-61 was a period of net in-migration, but more important, six of the ten who came have remained, and include among their number some of the most energetic and committed trappers in the community today. Since then the population has stabilized, and there has been very little in or out-migration.¹

Demography

Rates of birth, mortality and infant mortality on Banks Island have not differed significantly from those of the region as a whole. Health has been consistently better on the Island than on the mainland, and there have been no epidemics on the Island resulting in death. Where the Bankslanders fell victim to fatal diseases or even mild illnesses, these were invariably contracted during the summer visits to the mainland. Despite the relatively hazardous life, only two of the 95 men who trapped on the Island in the last 40 years died accidental deaths (one from exposure and the other from drowning).

The production-consumption unit in the Banks Island fur economy has always been the nuclear family. This has been true to an even greater degree than on the

¹This stability has been greater than Figure 3.1 would indicate, since the data refer to the season in which an individual commenced or ceased full time trapping on the Island. Until recently, this was coincident with actual immigration or emigration. However, during the period 1961-67, of the seven people shown as "immigrants", three were the sons of Bankslanders and were trapping in their own right for the first time, and another had come to the Island several years before but had not previously trapped full time. In fact only three people actually came to the Island for the first time during this period, and all of them did so in 1961. With regard to "out-migration" only seven of the nine actually left the Island, and that number includes the three immigrants in 1961 who only stayed for that season. Two men have taken wage positions at Sachs Harbour and although they still reside there, do not trap full time.

Figure 3.1
 IMMIGRATION AND EMIGRATION
 BANKS ISLAND, 1928-67

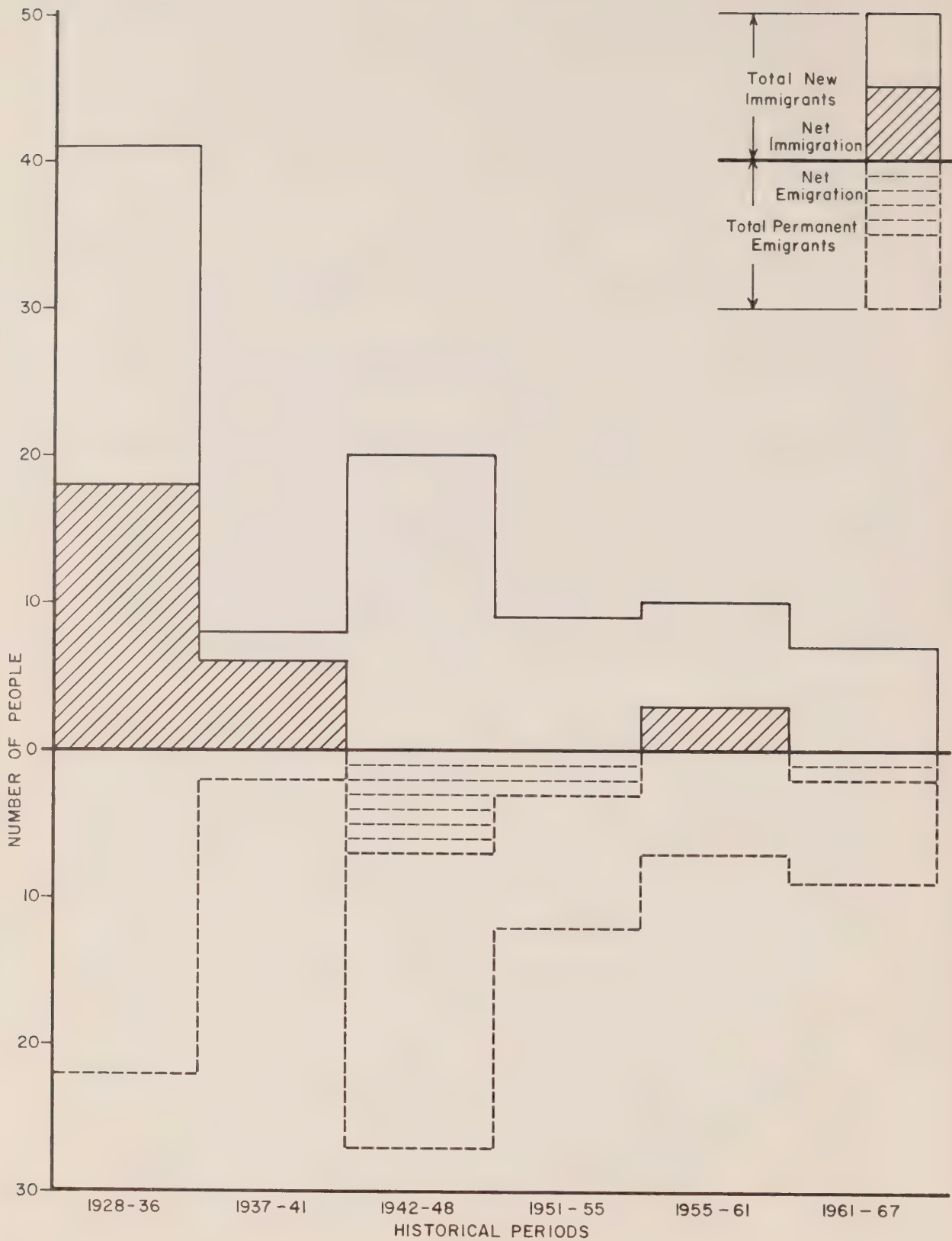


TABLE 3.7

Family size and proportion of full-time trappers to population, Banks Island^a
(years for which data available).

Year	Trappers	Single men	Families	People	Mean family size	Number of people per trapper
1940-41	14	2	11	44	3.8	3.1
1951-52	9	4	5	27	4.6	3.0
1952-53	9	4	5	31	5.2	3.4
1953-54	10	5	5	27	4.4	2.7
1954-55	20	11	9	54	4.8	2.7
1955-56	8	1	8	25	3.0	3.1
1956-57	4	1	4	16	3.8	4.0
1957-58	9	0	11	44	4.0	4.9
1958-59	15	2	15	64	4.1	4.3
1959-60	15	4	13	61	4.4	4.1
1960-61	17	6	15	65	3.9	3.8
1961-62	20	4	18	71	3.7	3.6
1962-63	17	3	16	65	3.9	3.8
1963-64	18	2	18	75	4.1	4.2
1964-65	17	3	16	77	4.6	4.5
1965-66	16	6	16	77	4.4	4.8
1966-67	15	5	16	73	4.3	4.9

^aDoes not include children attending residential school on the mainland.

Source: IA&ND/NAB 1000/176; R.C.M.P. Annual Reports, Sachs Harbour Detachment, field investigations.

mainland where there were more old and sick people, and a tighter network of sharing obligations existed amongst kin. Trappers normally began their careers on the Island as young men, either still single, or a year or so after marriage. They rarely brought their parents or other elderly relatives. Thus, families were small, although a few trappers who stayed a long time boasted families of 10 or 12. One man has 15 children still living. Table 3.7 indicates the family structure on Banks Island during the second phase of colonization. Data are available only for one year of the previous phase, but if typical, they demonstrate the moderate family size of the time and the relatively small number of dependents per trapper. As may be seen, the population of Banks Island has grown steadily since the mid 1950s. The erratic fluctuation in the number wintering on the Island, so characteristic of the first four periods of settlement, is absent in the last two. Mean family size has remained fairly constantly in the neighbourhood of 4.0. This is small in comparison to the Western Arctic region, where the 1967 Disc List shows 1,786 people in 263 families, for an average of 6.8. The Sachs Harbour average, however, refers only to the size of family actually being maintained year around in the settlement, and if the children attending residential school at Inuvik were included, mean family size would be very similar to that on the mainland.

The number of people per trapper has risen considerably since 1955. During the previous four periods, it was probably in the order of 3.0. Since then, this figure has steadily risen to almost 5.0.¹ This is a direct result of the Federal Government presence at Sachs Harbour, which has created wage labour opportunities for some men, and made it possible for widowed family heads to obtain welfare payments in the settlement.

Population distribution and the centralization of settlement

Historically, the spatial distribution of the population shows a trend toward centralization, accelerating rapidly in the late 1950s. Of the 13 sites used for wintering on the Island, 11 were established during the first phase of settlement, and no new sites were established after 1945. The number of sites used declined steadily with each period (Table 3.9).

The rationale and process of site selection has already been described. Over a period of years it was only natural that some sites would come to be considered more desirable than others. The chief criterion has been accessibility by schooner. It was soon realized that to winter a schooner along the west coast, particularly north of Sea Otter, was to risk being unable to clear the Island in the event of heavy ice conditions the following summer. After the late 1930s, it became customary for the schooner owners to transport some families to northerly points in the autumn and then beach the schooner at Sea Otter, Blue Fox, or especially, Sachs Harbour. After trapping, these families would gradually sledge their belongings back south to the schooners to await the dispersal of the sea ice. This involved several trips, and finally the establishment of a temporary camp at the departure point. Sachs Harbour was

¹ The high dependency ratios for 1957-59 are partly explained by the presence of several older people at the De Salis Bay Camp.

the most advantageous point in terms of ice conditions, since boats were very seldom unable to cross to the mainland from there. Sea Otter Harbour itself is rarely ice bound all summer but difficulties may be encountered proceeding south past Big Bluff, for there the water is deep and heavy ice may drift directly into shore.

Both Sea Otter and Sachs Harbour have good resource hinterlands. Seals and caribou are readily obtained in the vicinity, and both are well located for geese and bears. Of particular importance, both provide easy access to the broad, east-west river valleys in which foxes are plentiful. De Salis Bay has been the most important of the east coast sites, but as mentioned, its hinterland is relatively poor.

The three sites, Sachs, Sea Otter and De Salis, stand out in that order both on the basis of the number of winters they were occupied and the total number of people using them (Tables 3.8 and 3.9). The mean size of each camp from 1928 to 1961, when camp life ceased, shows Sachs Harbour as the largest (6.6 trappers), although this is weighted by instances when early freeze-up left no option but to stay at Sachs. These figures do not necessarily indicate the potential number of trappers each location could support. The comparative sizes of the three chief camps do reflect in some measure their relative advantages.

The mean camp size on Banks Island fluctuated inconsistently. In the 1930s, it was less than four, but rose to almost seven between 1942 and 1948. In the 1950s it was between four and five. The difference between 1937-41, which was characterized by high harvests and low camp density and 1942-48, when lower harvests accompanied much higher camp densities, is particularly interesting. There is some evidence that foxes were not as abundant in the latter period, and there were a greater proportion of less skilled trappers on the Island (although the established trappers had presumably become more skilled and better equipped which would counterbalance this). The decline in both mean and high catches may have been the result of overcrowding, or at least of an inadequate individual response to the increased number of people in terms of trapline location. The adjustments in land use patterns which accompanied the changing settlement distribution will be further discussed below.

The abandonment of the camps has already been described. The presence of federal government personnel and the communication and supply links had many implications for life on the Island. The threat of sickness, hunger and cold were profoundly diminished. The presence of white policemen and meteorologists did restrict some hunting and social activities, but it also brought new social and economic opportunities. Frequent movies, organized Christmas and New Year's parties, and regular contact and conversation with "outsiders" became part of a new way of life. Radio and airplane communication also enhanced the development of a new pattern of trade, featuring the export of furs to auction houses in southern Canada and the purchase of outfits through agents of these auction houses.

For many families, the anxiety resulting from sudden illness in an outlying camp and the race to the settlement for help was the deciding factor in moving into Sachs Harbour, but unquestionably the increased scope offered in economic and social activity was also important. The move to the settlement brought greater

TABLE 3.8

Camp size by number of trappers wintering at each site

Historical Period	Masik River	Sachs Harbour	Mary Sachs	Blue Fox Harbour	Lennie Harbour	Big Bluff	Siksik Point	Sea Otter Harbour	North Star Harbour	Storkerson Bay	Satsik River	De Salis Bay	Nokaluk-Coal Mine	Jesse Bay	All camps
1928-36	9	17	4	11	7	6	16				6	10	4	4	94
1937-41	4	15		2	2		14		4		6	8		2	57
1942-48		56		9	5	3	19			3	4	8		7	114
1951-55		21			6		10					4	3	4	48
1955-61		50			1		5			3		9			68
1961-67		103													103
Total	13	262	4	22	21	9	64	4	4	6	16	39	7	17	484
Minimum	4	1	4	1	1	2	1	2	2	3	2	1	3	2	1
Maximum	5	24	4	9	5	4	11	2	2	3	6	6	4	4	24
Mean (1928-61)	4.3	6.6	4.0	3.7	2.6	3.0	4.0	2.0	3.0	4.0	3.5	3.5	3.5	3.4	4.4

Source: Table A.4.

TABLE 3.9
Camp use by number of winters each site occupied

	Masik River	Sachs Harbour	Mary Sachs	Blue Fox Harbour	Lennie Harbour- Big Bluff	Siksik Point	Sea Otter Harbour	North Star Harbour	Storker- son Bay	Satsik River	De Salis Bay	Nokaluk- Coal Mine	Jesse Bay
1928-36	2	5	1	3	2	2	4			1	3	1	1
1937-41	1	4		2	1		4	2		2	2		1
1942-48		5		1	2	1	3		1	1	2		2
1951-55		4			2		3				1	1	1
1955-61		6			1		2		1		3		
1961-67		6											
Total	3	30	1	6	8	3	16	2	2	4	11	2	5

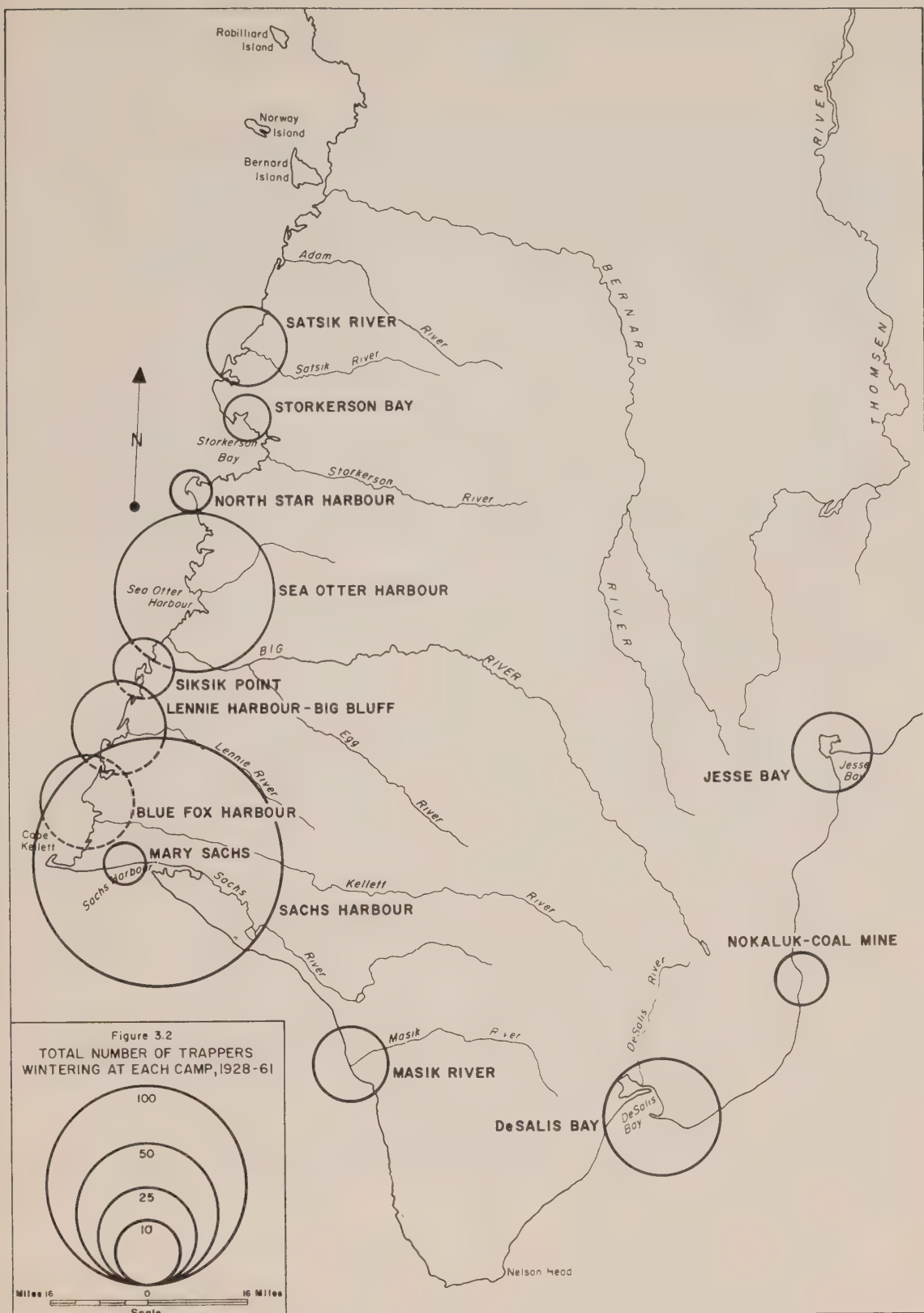
Source: Table A.4.

TABLE 3.10
Number and size of trapping camps, by historical period

Years	Number of trappers wintering	Number of sites used	Cumulative site winters ^a	Mean number of sites used per winter	Mean number of trappers per site per winter	Maximum number of trappers at any site in any year
1928-36	94	11	25	3.1	3.8	7
1937-41	57	9	19	4.8	3.0	7
1942-48	114	9	18	3.6	6.3	24
1951-55	48	6	12	3.0	4.0	7
1955-61	68	5	13	2.2	5.2	16
1961-67	103	1	6	1.0	17.2	20
Total	484	13	93	3.9	5.2	24

^aCumulative total of the number of sites used each winter for each historical period.

Source: Table A.4.



diversity and opportunities for enjoyment, as well as a greater security of health and livelihood.

Living conditions have improved markedly at Sachs Harbour during the last decade. After 1955 many families abandoned their double tents for more substantial dwellings incorporating progressively more wood and less canvas. By 1965 these had been replaced by fully insulated frame buildings of standard construction. Coal, the common fuel in the first phase of settlement, has been replaced by heating oil. Where formerly each family brought its own fuel supply by schooner, now there is a large stock maintained and distributed by the Department of Indian Affairs, and real shortages can no longer occur.

The demise of schooner travel

Once everyone was living at Sachs Harbour, the schooners were rendered obsolete by the improved transport facilities. Resupply was effected by commercial shipping and both the export of furs and visits to the mainland could be made quickly and easily by airplane. As a result everyone spent the summer on the Island, and a new pattern of seal hunting arose which altered the rest of the seasonal cycle and affecting trapping intensity.

The schooner had been symbolic of the special identity of the Bankslanders, especially in the 1940s and 1950s. The arrival of the Banksland fleet at Aklavik was an exciting and awesome event to both natives and whites alike.

The schooner had also become an instrument of immigration control. The informal passage arrangements of the early years gave way in the 1940s when more and more people sought to go to Banks Island, while the number of available schooners declined. The schooner owners were in a strong position to dictate not only who would make the crossing but at what price they would do so. In some cases, passengers were required to purchase shares in the voyage, in others to pay a designated fare in cash or fox pelts. Passage charges were designed to cover gas, oil and paint, and return a goodly profit to the owner; in fact the usual sum was about \$500. Some men who were passengers in the 1940s gave the high cost of passage as an important reason for quitting the Island. With the renewal of settlement in the early 1950s, passage arrangements became more relaxed, probably because the groups travelling on each schooner were of closer kin relationship than had been the case in the previous decade, and because the numbers coming to the Island were fewer. However, some of those emigrating to Banksland in the late fifties were charged for their passage.

With the decline of the schooner, alternate means of immigration control were needed. A restrictive trappers' association was formed, and given exclusive control of the Island (described in Volume Three).

Resource use and the annual economic cycle

Changes in the community have been accompanied by modification in the technology and techniques of resource harvesting plus growing knowledge of the Island and its resources. Recalling the description of the technology and annual

cycle of economic activity early in this chapter, we may trace certain changes in its various aspects (leaving the discussion of trapping for the last).

The autumn preparations changed very little until the 1960s. So long as the schooner and camp life persisted, the two months preceding trapping were practically all spent in setting up camp, and obtaining sufficient caribou and seal meat to last through the dark days. After 1960 when people began spending their summers on Banks Island, sealing for winter needs could be completed before freeze-up. Summer sealing, however, has required the purchase of canoes and outboards. Moreover, permanent housing and the abandonment of the schooners has freed a large block of time, although this has been partly offset by the advancement of the trapping season from the 16th to the 1st of November (see Table A.2). The middle two weeks of September, when sealing is over but the snow is not yet sufficient for inland travel, is now a much more relaxed time than in former days. Although many of the autumn chores remain, such as hauling ice and mending travelling equipment, much of the five or six weeks preceding the trapping season can be devoted to visiting the mainland, hunting caribou, or preparing the trapline. This latter opportunity has raised the potential productivity of the season's trapping activity, as will be described in Volume Two, Chapter One.

An additional consequence of having put up a good supply of seals in late summer is that little or no time is required during the trapping season to obtain dog feed. The number of seals taken per trapper has probably not increased greatly over the years (with the exception of 1963-65 when seal skins became an important source of income), but the minimum requirement is now met at different times and with more concentrated effort. During the schooner days seal hunting occurred throughout the year, although the major effort came in fall and spring. The desirability of a surplus in autumn was recognized, but this could be achieved only to a limited extent in the short time available. The construction of ice cellars at Sachs and Sea Otter eased the situation somewhat by allowing seals to be taken in spring before departure to be stored until the following winter.¹ Now almost all seals are taken between May and October, with intensive hunting in July and August resulting in a large surplus before freeze up. Rarely is it necessary to travel on new ice to the floe edge in October and November to augment the supply.

The introduction of the freight canoe and the outboard motor have not been the only technological changes in seal hunting. The old sealskin retrieving canoes for floe edge hunting were, by the late 1930s, commonly covered with canvas, and in recent years have been replaced altogether by scow-shaped craft of plywood construction. High powered rifles with telescopic sights have also eased the task of hunting. In the early days, the standard firearm for most purposes was a 30.30 rifle with open sights, although a .22 was sometimes used for sealing and of course shotguns were employed in fowling. Presently the .222 is the most popular rifle for sealing, and the 30.06 for big game.

¹ Some people filled fuel drums with blubber, and buried them in pits over the summer. Seal meat, placed between layers of blubber, could also be kept this way for dogfeed.

Modifications have also occurred in the caribou hunting pattern, due both to improved storage facilities (ice-cellars) and to the increased availability of imported food stuffs. Formerly hunting effort was concentrated in autumn and spring. The October hunt continues to be important, although now many caribou are also taken on the first trapping trip in November. The spring hunt has declined; many men do not go inland at all at this time of year. The number of caribou taken per hunter has remained fairly constant over the years. The meat has always been primarily for human consumption, and is rarely fed to dogs. Although imported foods seem to have increased gradually as a proportion of the diet, today's families are larger, and their total meat requirements have not changed. The abandonment of spring hunting seems to be related to a decline in demand for caribou meat at that season particularly, rather than a total demand reduction. In former years, dependence on country food was greatest in the spring months prior to departure for the mainland, when the outfits ran low. Now, if sufficient caribou are killed in autumn and winter, they are kept in the ice-cellars and last all year. The practice of drying large quantities of meat in spring has thus also declined, lightening the womens' work. Dry meat has become more of a travelling snack or even a delicacy than a seasonal staple.

Although fish has been of minor significance as a food source on the Island, fishing was attempted in many areas, especially in the early days. River and coast fishing is poor except for a small char run in Sachs River. Many of the inland lakes are well stocked, chiefly with lake trout. Formerly, people fished through the ice in spring and fall, using both lines and nets, but now only lines are used. Mid winter jigging on the trapline was rare, if indeed it occurred at all. A few families, especially those from the Tuk-Herschel area where fishing was common, made an effort to fish in the early days, but none were really dependent on it as a source of food. Raddi Lake near Masik River, and Siksik Lake south of Sea Otter Harbour were the chief lakes used in the first decade or so, but they are no longer fished. The Fish Lakes southeast of Sachs Harbour were discovered in the 1940s, and these are still used because of their proximity to the settlement. The lakes at the head of the Big River are good for fishing, and were used by those camped at De Salis. More recently, several lakes in the upper Kellett Valley have come into use by Copper Eskimos who hunt and trap in this area.¹

Most families camping on the west side of the Island visited the snowgoose nesting grounds at Egg River every spring. Since the arrival of R.C.M.P., the Migratory Bird Convention has been strictly enforced. Each family is limited to 30 geese and eggging is forbidden. Formerly geese and eggs formed a significant proportion of the spring diet. Families took as many as 100 birds, and some hauled 200 or 300 eggs back to the camps in wash tubs. Efforts were sometimes made to remove only a few eggs from each clutch rather than cleaning out nests entirely, and the average egg take per family was probably less than 100.

¹In the 1930s, the Copper Eskimos who spent summers on the Island reputedly ponded streams with stone weirs, and speared fish.

Finally, mention should be made of polar bears, which were hunted any time of the year, especially by trappers whose lines followed the coast. During the years 1928-48, the take was less than today's because bears were used primarily for meat and clothing. Low pelt prices were the rule, and not until the 1950s, with the influx of transient whites with high wages and a desire for souvenirs, did there develop a good market for bear skins in the Western Arctic.

Trapping

Several modifications have occurred in travelling equipment and techniques. The number of dogs per team has gradually increased to about nine¹, and basket sleds have been replaced by toboggans. Mechanized transport was first introduced in 1961 but did not come into general use until 1967, after the present study was completed. Before 1948 snow houses were always used for overnight shelter on the trail. Double walled canvas tents were introduced with the renewal of settlement in 1951, and within a few years they had completely replaced the snowhouses. Shortly after, caribou skins gave way to duffle and down in the manufacture of outer clothing.

The technology of trapping itself has not changed, although the pool of both equipment and experience has increased greatly over the years. The men run longer lines, make longer trips, and set more traps than formerly, and despite congregating at a single point, have maintained and even extended the total area exploited. Particularly important has been the development of inland trapping, which is far more extensive than ever it was on the mainland or Alaskan coasts, and has been a significant factor in the continued viability of trapping on Banks Island.

Some of the greatest changes in the early trapping pattern described previously came in the 1940s. During the years 1945-48, several trappers were running lines of 100 to 200 miles in length, with 600 or even 800 traps, and making trips of 10 to 14 days or more, much as is done today. A few of the best trappers were spending up to 75 per cent of their time on the trail, making trips of 17 or 18 days.

This fairly rapid growth in the number of traps and the length of lines was probably a response to the declining economic conditions; a recognition that in order to make a given amount of money one had to get more foxes than before, and that this could only be done by setting more traps over a greater distance. This had not happened at the end of the 1930s, when prices were low, because there had been both a greater abundance of foxes and less surplus capital to reinvest in traps.

Figures 3.3 to 3.9 and Tables 3.11 and 3.12 illustrate the expansion of the trapping grounds since 1928. Of the 484 individual winterings on the Island, the traplines for 303 have been recorded through interviews. An even higher proportion

¹This increase has not been steady, since, as is common in the north, peak fox years have been associated with epizootics which have reduced the dog population periodically. Another important development in dog team driving, although one which occurred before the colonization of Banksland, was the training of a lead dog which would obey commands. In aboriginal times, the dogs followed the man, who set both direction and pace. The lead dog, introduced by the early white trappers, allowed the driver to stand on the sled or toboggan, or run beside the team, and thus increased both the speed of travel and the daily distance covered.

TABLE 3.11
Extent of trapping grounds, Banks Island, 1928-67

Years	Total extent (square miles)	Proportion of whole Island ^a (per cent)	Area of intensive use (square miles)	Proportion of whole Island ^a (per cent)
1928-36	5,830 ^b	19	2,690	9
1937-41	7,850 ^b	25	4,000	13
1942-48	13,120	42	3,470	11
1951-55	7,770 ^b	25	2,460	8
1955-61	10,540	34	4,480	14
1961-67	10,770	35	6,290	20

^aTotal area of Banks Island plus approximate three mile limit offshore equals 30,930 square miles.

^bEstimated.

Source: Figures 3.3 — 3.8.

TABLE 3.12
Development of inland trapping, Banks Island, 1928-67

Years	Inland part of utilized area ^a (square miles)	Inland proportion of utilized area (per cent)	Inland part of intensive area ^a (square miles)	Inland proportion of intensive area (per cent)
1928-36	3,360 ^b	58	1,190	44
1937-41	4,970 ^b	63	2,130	53
1942-48	10,240	78	2,290	66
1951-55	5,840 ^b	75	1,570	64
1955-61	8,560	81	3,320	74
1961-67	9,120	85	5,020	80

^aAreas three or more miles from coast.

^bEstimated.

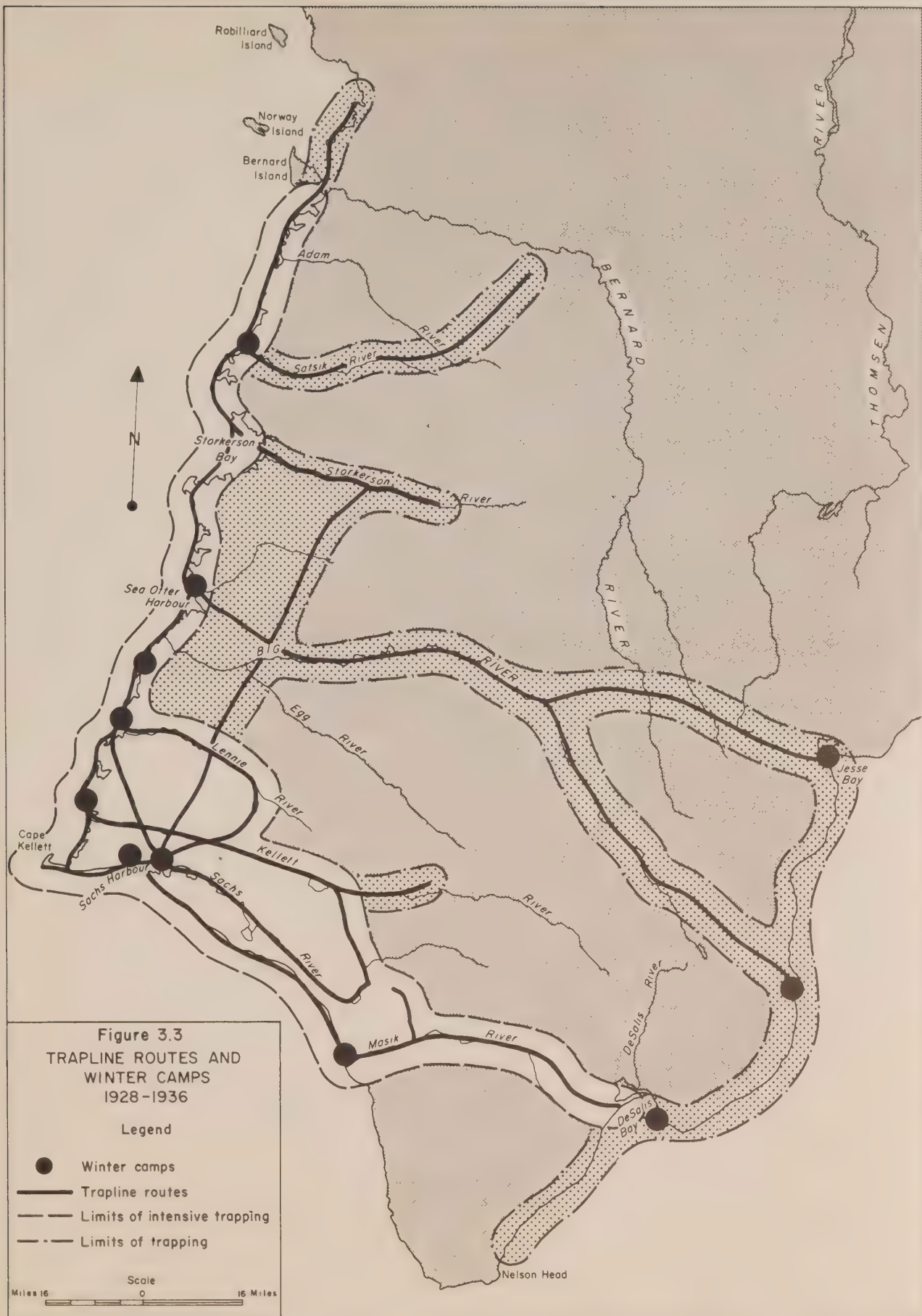
Source: Figures 3.3 — 3.8

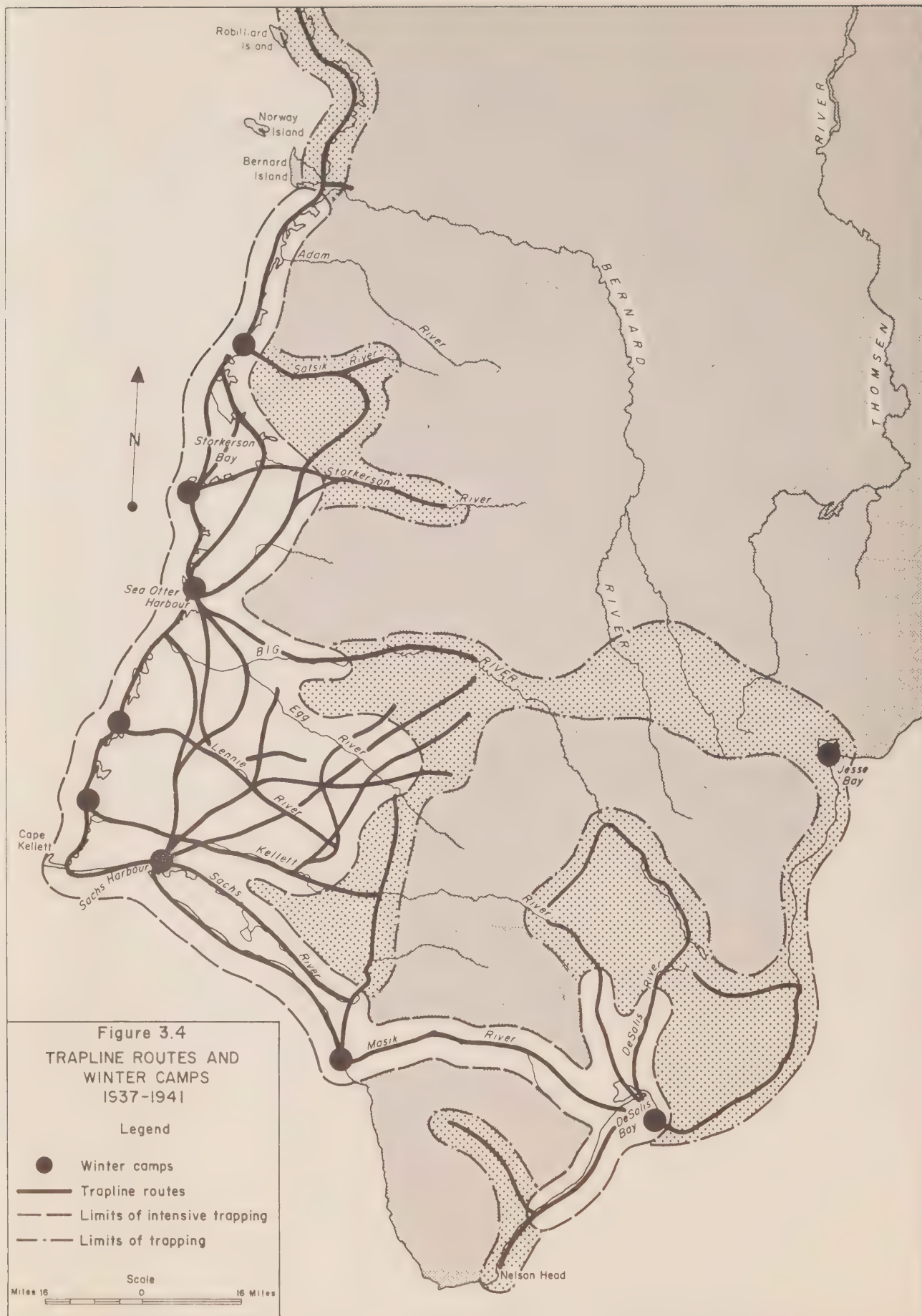
TABLE 3.13
Relationship of trapper population to size of trapping grounds, Banks Island, 1928-67.

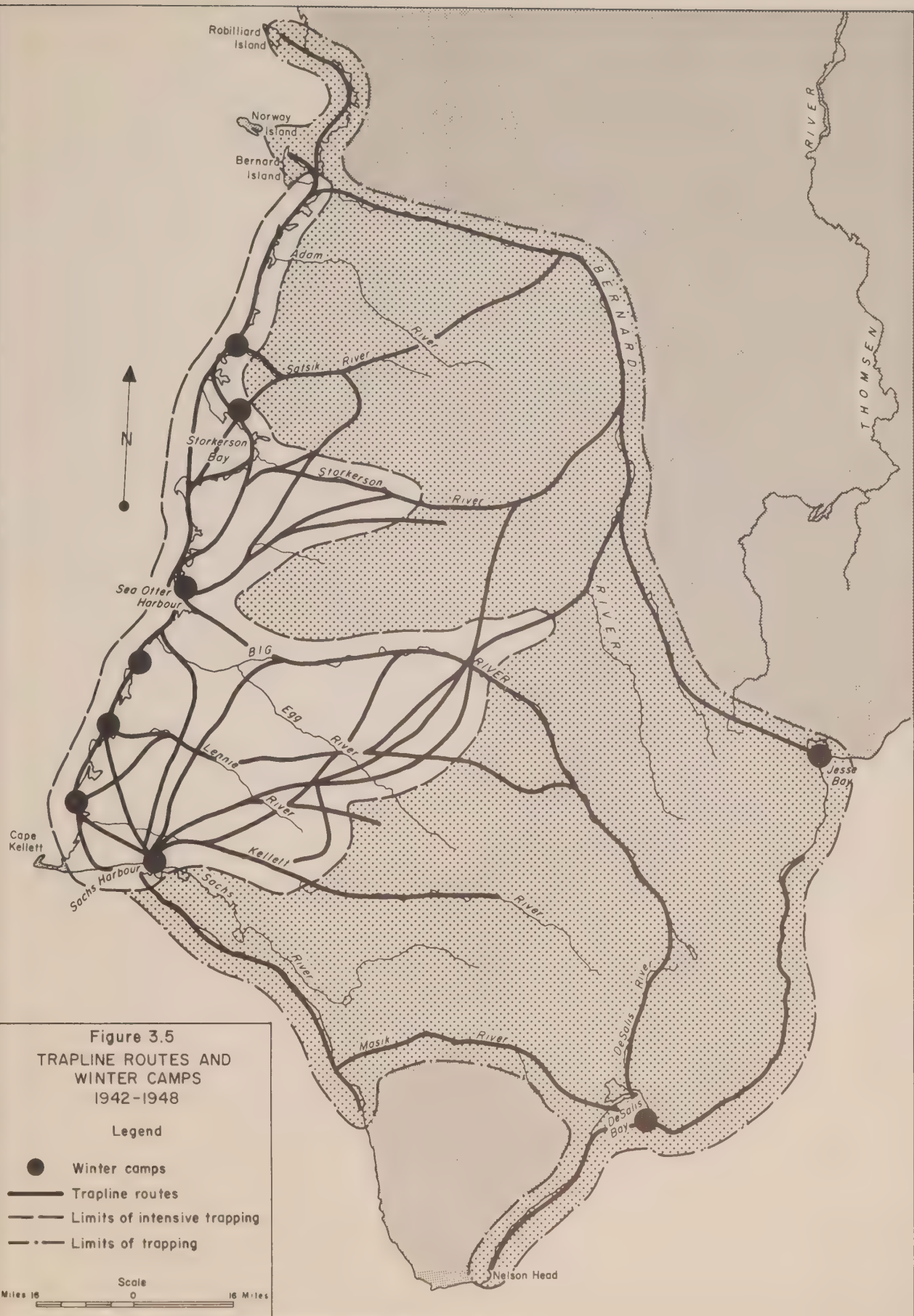
Years	Mean number of trappers per year	Maximum area trapped (square miles)	Territory used per trapper (square miles) ^a
1928-36	11.8	5,830	494
1937-41	14.3	7,850	549
1942-48	22.8	13,120	575
1951-55	12.0	7,770	648
1955-61	11.3	10,540	933
1961-67	17.2	10,770	626

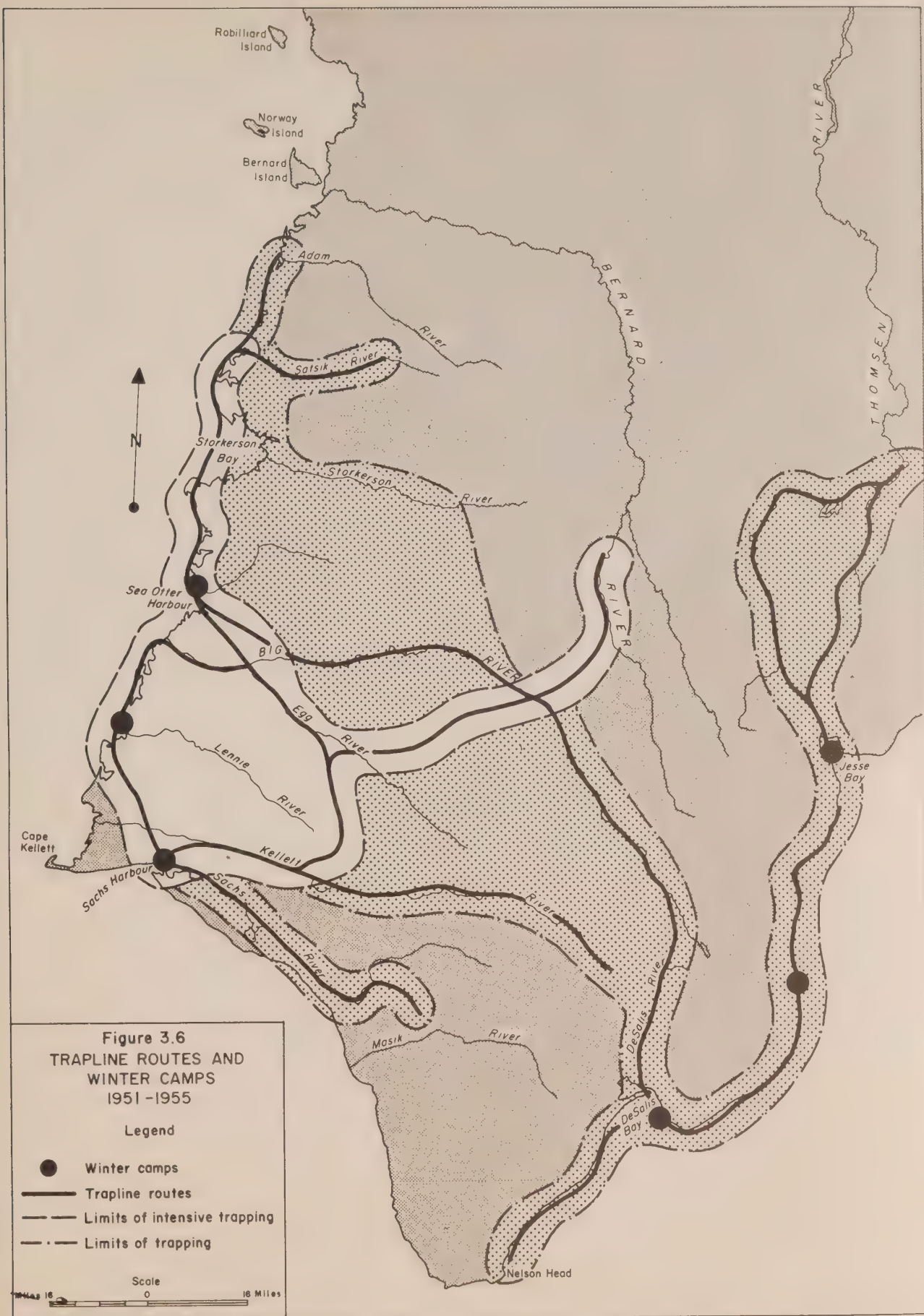
^aThis statistic is presented only for comparative purposes. Only in the grossest sense does it represent an absolute value, partly because it is an average based on other averages, and because it is a function not only of trapline length (with the reservations noted in the text) but also of the total configuration of traplines.

Source: Tables 3.8, and 3.11.









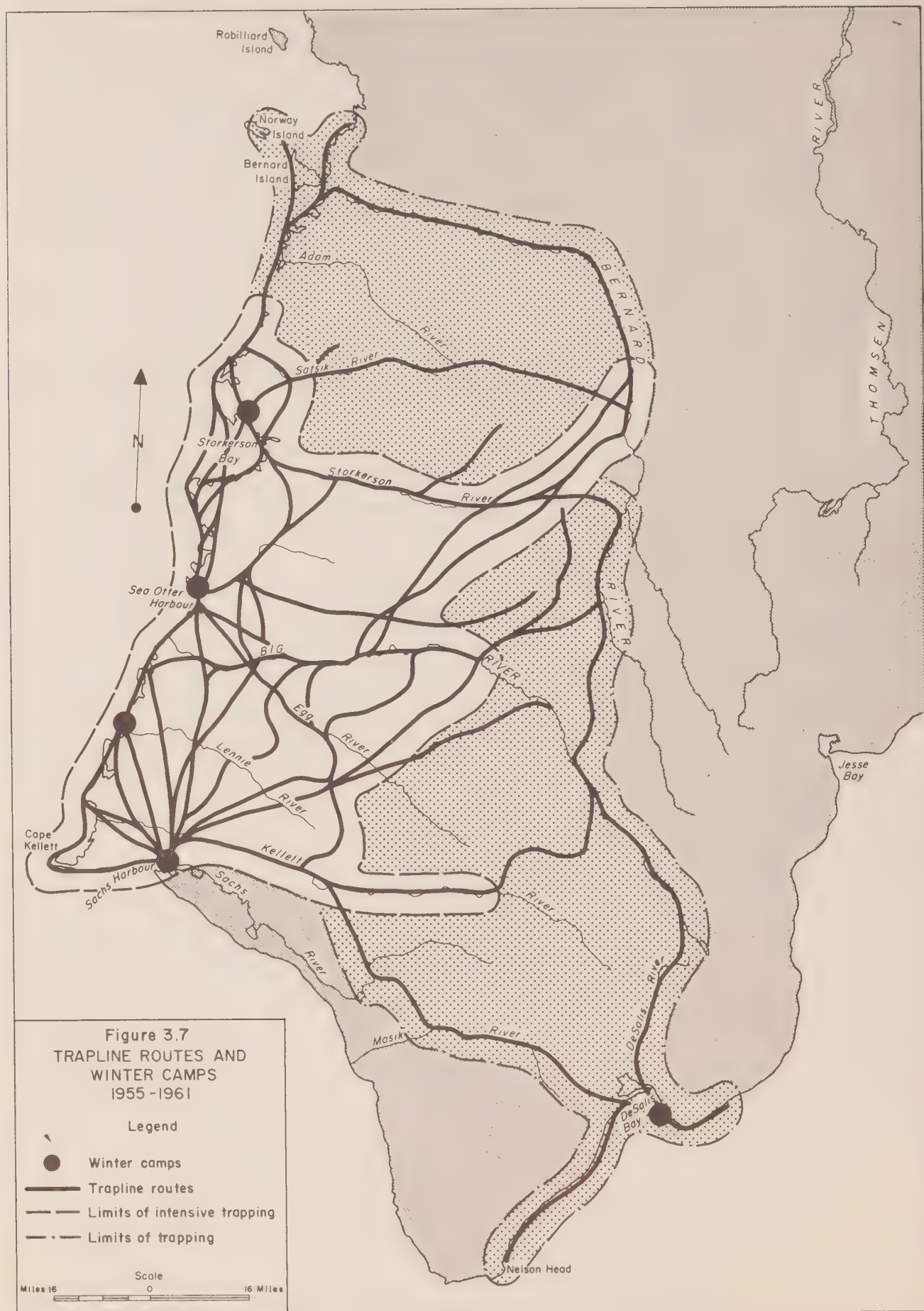
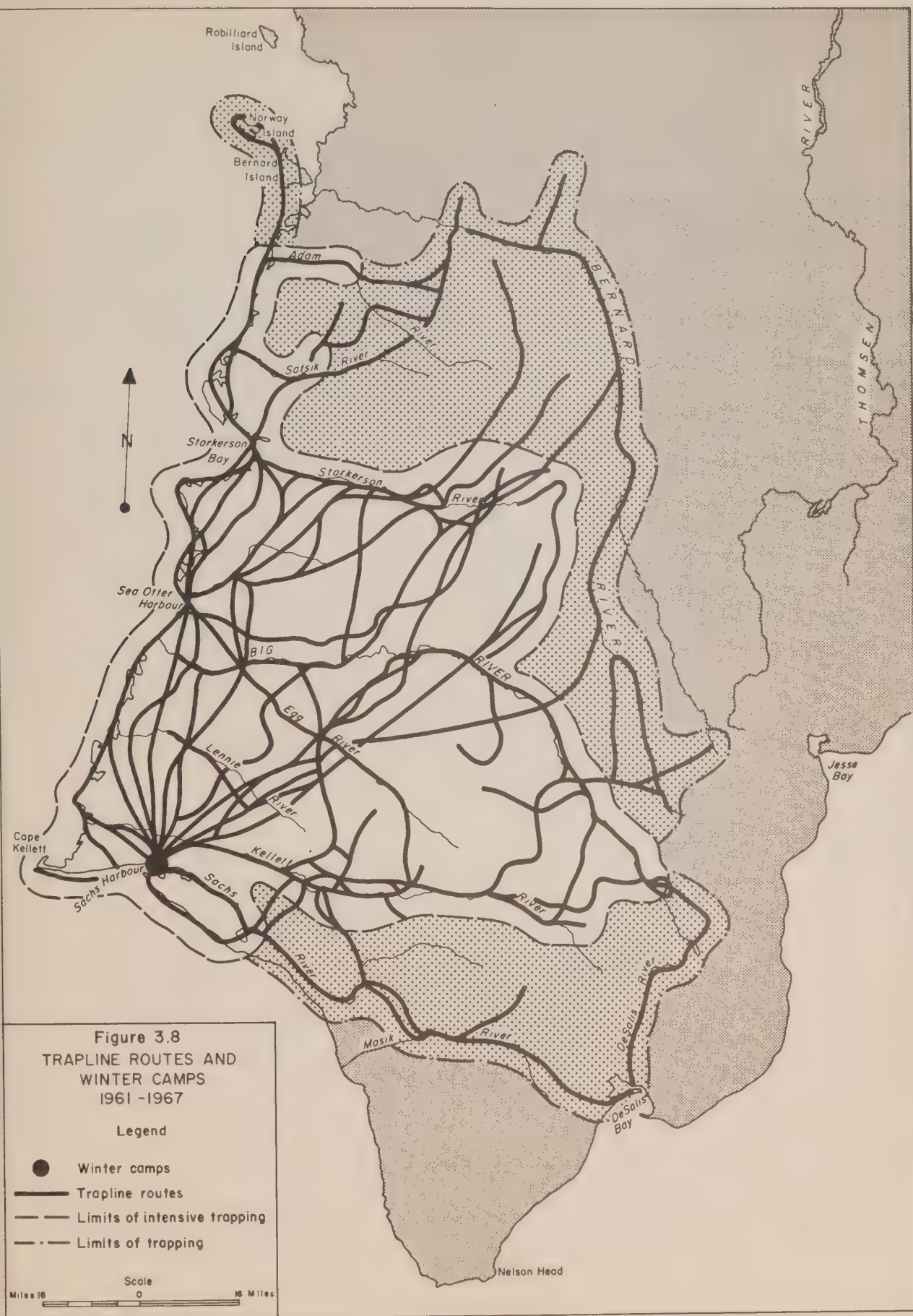


Figure 3.7
TRAPLINE ROUTES AND
WINTER CAMPS
1955-1961





of the traplines of the best and most energetic trappers (i.e. the longest traplines and those covering new ground) have been recorded. As some if not most of the unrecorded lines followed the routes of those already recorded, the routes and areas depicted on the maps are nearly comprehensive. For those periods for which information is somewhat deficient (1928-41, 1951-55), the boundaries of maximum extent of use have been adjusted to take in those areas which would most likely have been trapped from certain camps. The delimitation of the areas of intensive use has been made to distinguish between those routes which may have been used only once or twice, and those which were used repeatedly and by several trappers. It should be noted that only the routes are depicted, not each individual trapline.

In order to measure and relate the spatial aspects of trapping intensity since 1928, it is necessary to delimit areas of exploitation or land use in relation to the line trapping of arctic foxes. The development and applications of this method of delimitation are discussed in Volume Two, Chapter One. It is postulated that under average conditions a trap "exploits" an area of three miles radius around it. Therefore land three miles on either side of a trapline, plus somewhat more distant areas completely enclosed by traplines, are considered to be used for trapping. The total areas so delimited are somewhat arbitrary parameters of the changing level of exploitation, which may be compared from one time period to another. They are not strict delineations of exploited versus unexploited areas, for there is no way of verifying that a given trap will attract foxes from one point and not another, nor can it be said where a fox in any given trap might have come from. The areas of use as determined here are more useful as comparative than as absolute measures.

From Table 3.11, we see that in general both the maximum extent of use and the area of intensive use have increased over the years. Changes in the area trapped are functions of the changes in the number, length, configuration and spread of the traplines. These in turn reflect the number and distribution of trappers, their knowledge, skill and equipment, the level of co-operation or competition amongst kin/residence groupings of the population, and general economic conditions. Not all of these factors can be quantified, so only tentatively may we suggest the relative weighting of these factors in explaining the various aspects of land use.

The size of the trapping area shows a marked association with the number of trappers, particularly when the mean number of trappers per year and the maximum extent of trapping area are compared for each historical period. It therefore seems appropriate to begin with the relationship between population and utilized area, and to interpret the variation from it in terms of other known influences. Variation in the area of intensive use must also be considered. This exhibits no direct correlation to population, but may also be explained in terms of the other factors mentioned.

The first period of settlement was experimental, and as knowledge of the Island increased, there was a dramatic shift to inland trapping. For example, during the 1950s, the approximate mean of 12 trappers per year used much more territory than did the same number between 1928 and 1936. The territory used per trapper has

almost steadily increased over the years¹ (accepting the limitations of this concept noted in Table 3.13), and follows naturally from the increase in the number of traps and the length of lines.

It has been suggested that the remarkably large territory used between 1942 and 1948 was a result of the large trapper population plus the general increase in trapline length. Another factor may have been the disparate nature of the camp groups on the Island. During that period the crews of virtually every schooner were distinguished from one another by kin and residence ties, and some of these groups were under pressure to find new trapline routes since much territory had already been preempted by the more established trappers. The ephemeral nature of this expansion is demonstrated by the fact that the area of intensive use actually declined during this period. In the 1951-55 period, not only were there fewer trappers, but these were represented chiefly by three family groups, all from the Tuk-coastal area, each monopolizing a fairly restricted number of routes.

The total area utilized for trapping on Banks Island has continued to increase, despite the abandonment of the camps. This is in sharp contrast to the experience of the older and larger fur trade centres, both in the northern forests and on the tundra. There centralization has been accompanied by the abandonment of the outlying resource harvesting areas, in favour of the immediate hinterlands, which then become overexploited. Although the number of points of origin for traplines has steadily declined since the 1930s, adjustments in the length and arrangement of traplines have more than compensated for this, even since the final abandonment of the camps. During the most recent period, the consequence of the increased trapper population has been a spectacular expansion of the area of intensive use, rather than of the maximal extent. Whether some sort of equilibrium is now being approached will be discussed in Volume Two, Chapter One.

Theoretically, given a rectangle of uniform surface characteristics and a single point of origin at one corner, the ideal arrangement of traplines would be a set of equally spaced lines radiating from this point, forming a quadrant of utilized land. A quadrant of shorter radius would represent the area of intensive exploitation. The region north and east of Sachs Harbour is in fact broadly uniform trapping country, and Figure 3.8 shows that this theoretically optimum pattern of use is now being approximated. The continued growth of inland trapping (Table 3.12), has been a necessary adjustment to the centralization at Sachs Harbour since with everyone living at one point on the coast, only a few trappers can feasibly trap the shore line, and the rest must go inland.

The use of other land areas for supporting activities such as caribou and seal hunting, has readily been adjusted to existing trapping and camping arrangements; the critical spatial requirement has always been for trapping. A complete discussion of all aspects of current land use will be given in Volume Two, Chapter Two.

¹ The unusually high figure for 1955-61 probably reflects the drawing off of all but the most energetic and committed trappers by wage employment opportunities elsewhere.

Fur marketing

The special circumstances of the settlement of Banksland gave rise to a pattern of trade quite unlike that of most other fur trade communities; one which despite many changes has continued to be both unique and efficient. The absence of a local trading concern, and the summer trade with Pedersen and the Hudson's Bay Company, has already been described. After Pedersen's withdrawal the Bankslanders traded with a number of Aklavik concerns, chiefly S.M. Pepper Ltd. During the prosperous second phase of settlement, and once again in 1948, two or three individuals consigned some of their furs directly to auction houses in Edmonton, Winnipeg and Seattle (Table 3.14). This practice appears to have been encouraged by agents of these auction houses who came north looking for business in these years, and who were attracted by the reputation of individual Banksland trappers. A number of muskrat trappers in the Delta were also sending their furs out, and the local broadcasting of fur auction reports no doubt aroused the interest of the Bankslanders as well.

The renewal of settlement in 1951 was backed heavily by local trading concerns, chiefly the Hudson's Bay Company in Tuktoyaktuk and L.F. Semmler in the Delta. Not until the trappers had fulfilled their obligations to these concerns were they able to send furs out again. By the mid 1950s however, with improved communications with the outside on one hand, and low prices and restricted credit prevailing locally on the other, the advantages of exporting were clear. In addition, Fred Carpenter, the leader of the Banksland group, was personally acquainted with an official of Edmonton Fur Auction Sales Limited, who through Carpenter encouraged the Bankslanders to export, offering higher prices and more credit. After 1955, the few relatively well-to-do families remaining on Banksland conducted virtually all their trade directly with Edmonton, and gained the additional service and benefit of bulk purchasing at southern costs.

There was simultaneously, however, an increasing demand for a small store in the village which could stock a few essentials in case families ran out before summer. The Hudson's Bay Company declined to meet this need, and the Department of Northern Affairs, after toying with the idea of a Government operated or supervised store, encouraged Fred Carpenter to take on this operation (IA&ND/NAB 1000/176(3)). Carpenter had for years had both the means and initiative to bring a large outfit and could usually spare a little in trade to those in need. He obtained a trading post permit in 1958, and with the financial assistance of Edmonton Fur Auction Sales began importing considerable stock. Since that time the high proportion of direct exports of furs has declined, as families grew used to trading some of their furs locally for immediate needs and for certain specialized goods. More recently the Bankslanders have also sold some of their furs to Semmler in Inuvik, to cover specific stock requirements and to obtain cash against their accounts when in Inuvik. The majority of furs however are still exported. Edmonton has been the chief destination, but a few trappers also send furs to Montreal and Vancouver.

An important consequence of exporting furs to auction has been payments well above the local average price. An examination of Figure 3.10 shows that the Bankslanders have almost always obtained better than the N.W.T. average price, and this margin has greatly increased in the last decade. Their gross income has been

TABLE 3.14

Foxes exported directly to auction houses, 1939-67

Year	Edmonton	Montreal	Destination			Seattle	Total	Proportion of total catch (per cent)
1938-39						400	400	6.2
1939-40	100						100	6.8
1940-41					200		200	3.7
1947-48	593						593	26.5
1952-53		100					100	8.3
1953-54	520	100					620	35.8
1954-55	2229		300				2529	42.2
1955-56	934						934	90.6
1956-57	369						369	94.4
1957-58	2567						2567	93.7
1958-59	700	45					745	38.4
1959-60	672						672	66.0
1960-61	2384	1245			73		3702	67.7
1961-62	1006	258					1264	63.8
1962-63	1734	329					2063	60.2
1963-64	939	294	32				1265	63.8
1964-65	576	152	43		8		779	50.5
1965-66	1509	277	43				1829	61.4
1966-67	4369	855	130		10		5264	60.9

In addition, the following quantities of foxes were exported by part time trappers:

1955-56	7	1960-61	14
1956-57	17	1962-63	23
1957-58	50	1965-66	76
1958-59	20	1966-67	414

Source: Fur Export Tax Returns, Fort Smith, N.W.T.

consistently 25 per cent above local trade, and the benefit of bulk purchasing in Edmonton has reduced their costs. In an age when the fur trade has declined despite general economic growth, and trapping at best brings a good living rather than the opulence of former days, such an increment has been an important factor in maintaining the health of the Sachs Harbour economy.

Income and expenditure

Almost \$2,000,000 worth of white fox has been harvested from Banks Island since 1928. The Island has provided a better living for trappers than any other region in northern North America, although annual income has been erratic due to fluctuating prices and production. During the early years the Island provided particularly remarkable wealth. The mean annual per trapper income between 1928 and 1936 was about \$3,500, with the mean maximum income being about \$7,900. This annual mean of \$3,500 was almost double the average earnings of skilled workers, and over five times the earnings of unskilled workers in Canada as a whole for the year 1931 (Urquhart and Buckley, 1965:96). Even during the depths of the Depression the Banksland trappers earned more than double the average wage in the manufacturing sector of the economy. Income levels of the 1930s were down drastically from the previous decade, but the trappers remained well-to-do by national standards, and it is not surprising that some were still in a position to buy expensive schooners and take winter holidays in southern Canada. At least two Bankslanders who died before 1941 left estates with net values of tens of thousands of dollars.

Figure 3.12 shows the relationship between trapper income on Banks Island and the mean annual level of wages and salaries in the manufacturing industries of Canada (figures unadjusted for inflation). It must be stated at the outset that such a comparison is complicated by the fact that on the one hand, the trapper earns a significant non-dollar income through country resources used for food and clothing, while on the other he is required to reinvest a portion of his cash income in capital stock. For the present these are assumed to be approximately self-cancelling; i.e. that net cash and kind income is about equal to gross cash income, and therefore comparable to wage data which are neither augmented by non-dollar income nor diminished by reinvestment requirements. Differing expenditure requirements and desires, and deductions related to national or provincial services and benefits, are also ignored.

Mean trapper income has varied from one period to the next, and very much so from year to year, although Figure 3.12 indicates that over the 39 year span its general level has not increased. The national level of wages and salaries in manufacturing has, however, quadrupled during this time, with the result that today's trapper is in a relatively much weaker position. Until 1948, the trappers' income never fell below the national wage mean except in the years they were unable to reach Banks Island. The three year moving average shows that income was about double the national mean during the thirties, quadruple during the early war years, and fell to double again in the mid forties before plummeting in 1948.¹ This

¹ On the mainland coast and in the Delta, trapping income probably fell below the national wage mean in 1930, and with the possible exception of the war years has continued to lag further and further behind.

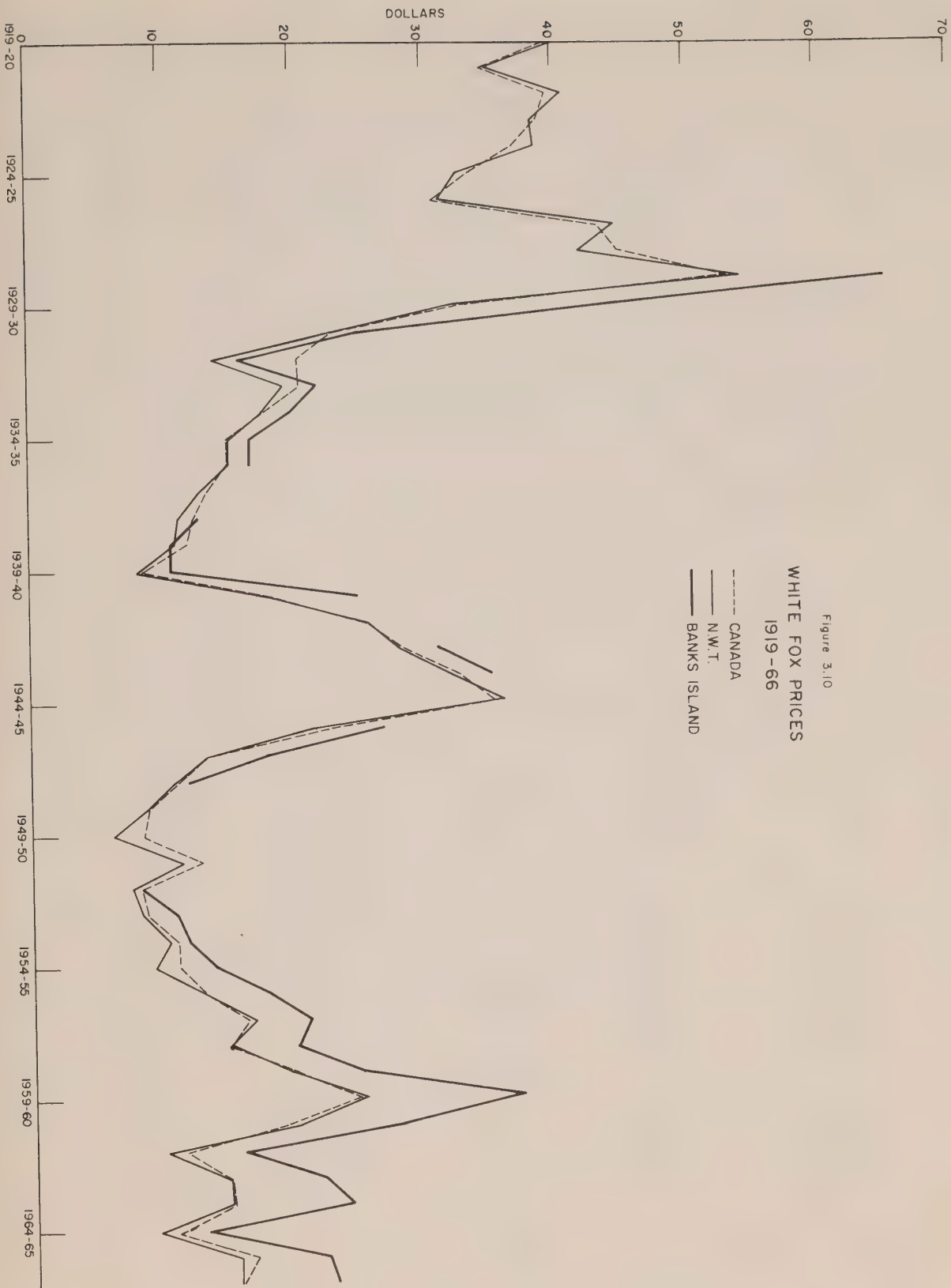


Figure 3.10
WHITE FOX PRICES
1919-66

--- CANADA
— N.W.T.
— BANKS ISLAND

TABLE 3.15

White fox production, Banks Island, by historical period

Years	Trapping man-years (full-time trappers only)	Total fox catch	Mean catch per man-year	Trapping man-years and catch for part- time trappers
1928-36	94	11,771	125	
1937-41	57	15,094	265	
1942-48	114	17,012	149	4/15
1951-55	48	11,580	241	
1955-61	68	12,590	185	14/359
1961-67	103	20,374	198	24/1098
Total	484	88,421	183	42/1472

Source: Table A.5.

TABLE 3.16

Earnings from white fox, Banks Island, by historical period and phase

	Total value of Banks Island Catch	Mean annual value of Banks Island catch	Mean annual income per trapper	Mean annual highest individual income
a. by period				
1928-36	\$ 317,713	\$39,714	\$3,380	\$17,562
1937-41	246,066	61,517	4,317	8,920
1942-48	406,516	81,303	3,566	10,241
1951-55	140,493	35,123	2,927	4,599
1955-61	328,457	54,743	4,977	7,669
1961-67	421,950	70,325	4,097	8,585
b. by phase, and total				
1928-48	\$ 970,295	\$57,076	\$3,661	\$ 8,669
1951-67	890,900	55,681	4,068	7,245
1928-67	\$1,861,195	56,400	3,845	7,979

Source: Table A.6.

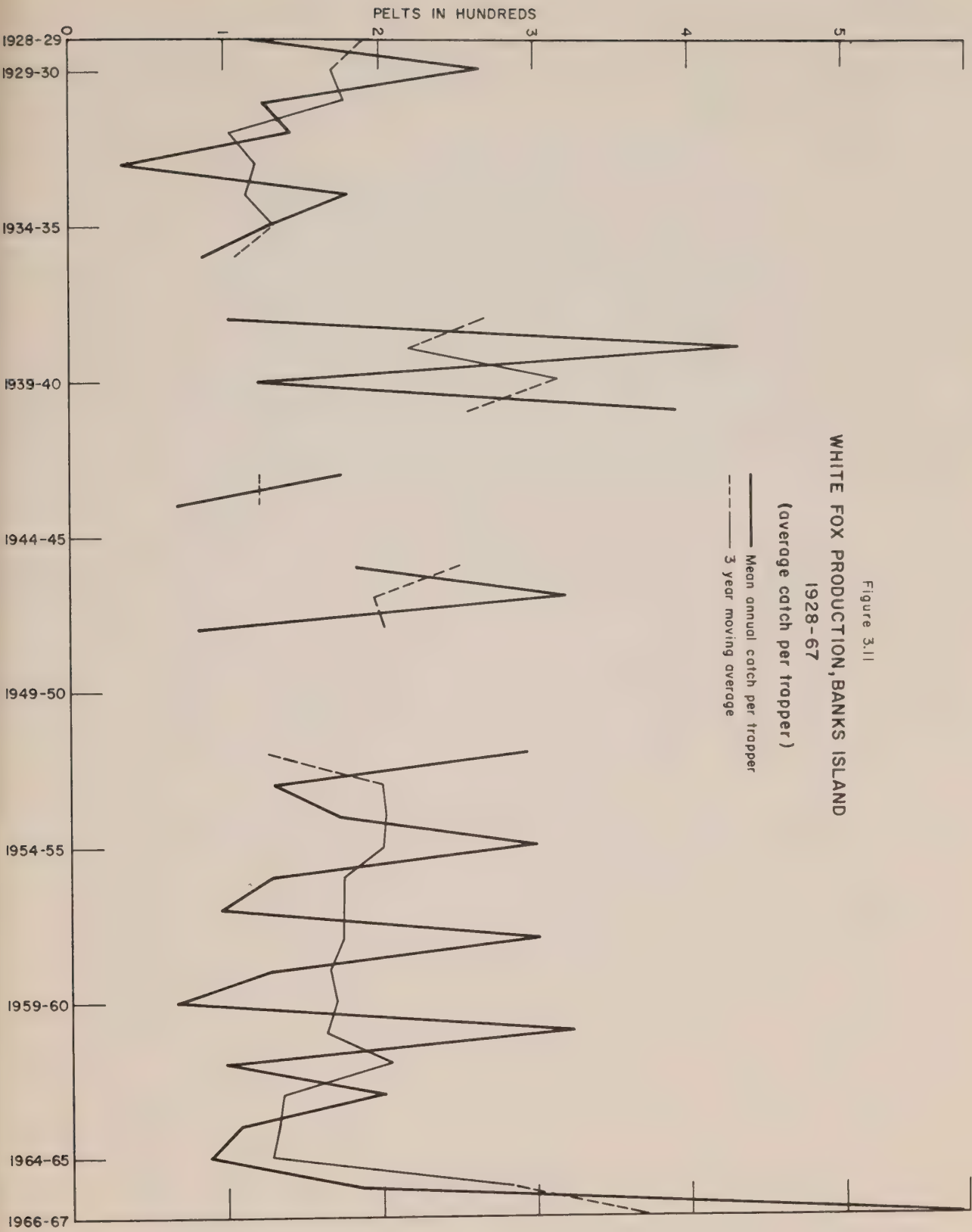
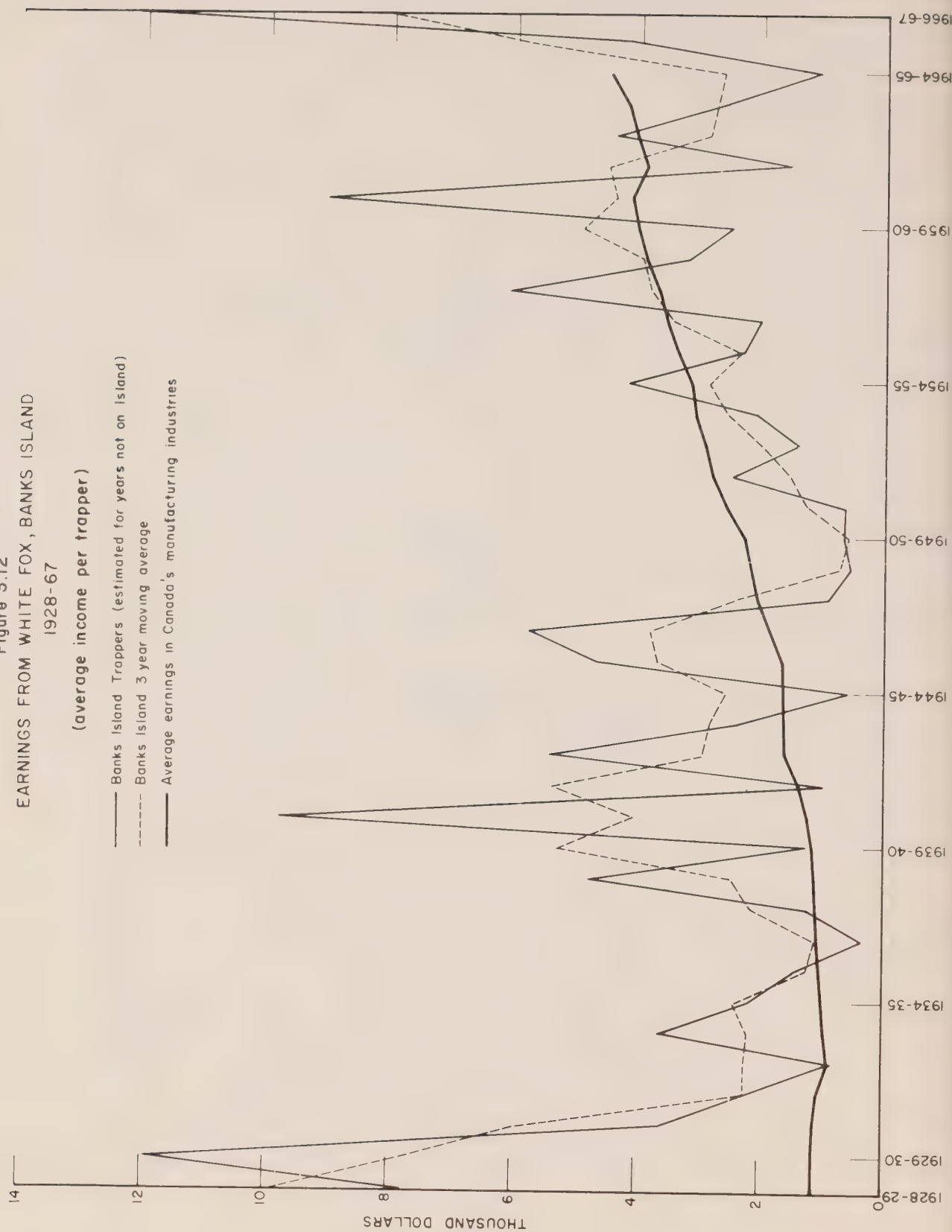


Figure 3.12
EARNINGS FROM WHITE FOX, BANKS ISLAND
1928-67

(average income per trapper)



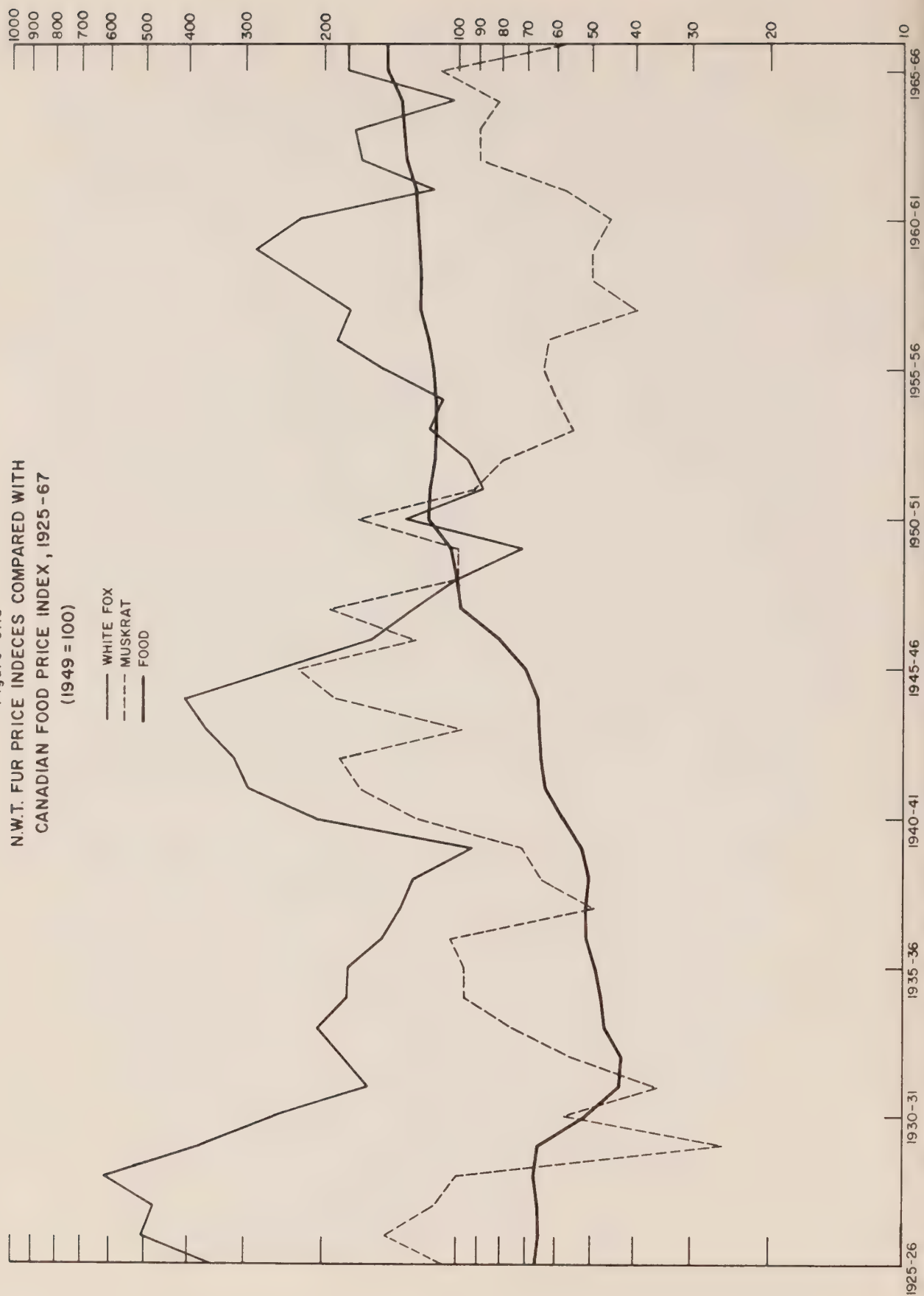
decline heralded another three years of economic stagnation during which income was less than half the national average. Since then the wide fluctuations in income have centred roughly on the national figure. The moving average shows a gradual recovery in the early 1950s to a high point exceeding the national mean in the late 1950s, another decline in the early sixties, and in the last two years a marked increase. Since 1951 the moving average has remained within 50 per cent on either side of the national mean, and usually much closer.

Aside from the very first years of settlement, two sustained earning peaks stand out. The first was the 1937-41 period during which mean income was \$4,317, and the second was 1955-61 when mean income rose to \$4,977. Possibly a third such peak is now occurring but it is too early to tell. Interestingly enough, the peaks and troughs in the moving average coincide rather closely with those in the price received per pelt (Figure 3.10), although the big earning peak for Bankslanders in the 1940s slightly precedes the price peak, for reasons already outlined. This strongly suggests that despite the many and variegated strands in the development of settlement and production over the years, the economic status of the Banksland trappers has been more closely linked to the general health of the fur market than to any other single factor or even combination of factors.

The spread of incomes during each period provides a further illumination of some of the characteristics of these periods already noted. For example, during the 1940s when the population was the least homogeneous and trapper capability the most varied, the greatest differential occurs between mean average and mean high incomes. Conversely, when the opposite was the case during the 1950s (especially the later years) there was much less difference. Otherwise, the mean high income has been slightly over double the average (see Table 3.16). Those trappers who are consistently among the top three or four earners have fared extremely well over the years, and even today earn considerably more than does the average citizen in industry.

The allocation of income has also undergone change. Traditionally, there have been three fundamental areas of expenditure: food, fuel and capital equipment. The first two are inelastic, in the short run at least. Over the entire period however, fuel has become less costly. Present expenditure on all fuels may be as little as half that of a generation ago, even without adjusting for inflation. The change in food expenditures is less clear. Nationally, food prices have almost tripled since the Depression. (Figure 3.13 compares this increase with fur price trends). Yet local food preferences have changed so that although expenditure has undoubtedly risen, the degree cannot be stated. The focus of re-investment in capital equipment has changed, and the total has probably risen somewhat. One large expenditure no longer required is the maintenance and operation of the schooners. No expenditures were made for depreciation; in most cases when the schooners finally deteriorated they were not and could not have been replaced. With the exception of the schooners, however, capital stock had been maintained rather than exploited, and as equipment has become more specialized, complex and expensive, the reinvestment level has tended to increase. Schooner expenditures were in any case replaced by canoe and outboard purchase and maintenance, and the increase in the number of traps and dogs has further raised costs.

Figure 3.13
N.W.T. FUR PRICE INDECES COMPARED WITH
CANADIAN FOOD PRICE INDEX, 1925-67
(1949 = 100)



During the first phase of settlement when times were good (and relative to the mainland this was almost always the case), a fair portion of income was devoted to "luxury" expenditures. Non-essential durables and services, gambling and parties were important objects of expenditure; the avenues to prestige which to the Bankslanders was greater reward for their hard winter's work than mere cash. The Bankslanders were more successful at this than most of the mainlanders because they had more money. Yet despite the obvious displays of wealth, they were careful with their money. Slobodin recalls that the Bankslanders had the reputation among the McPherson Indians of coming to Aklavik with two bags of money, one for gambling, and the other for their outfits (personal communication, 14 August 1966). The bags of money were doubtless apocryphal, but the tale itself indicates, the shrewdness and foresight that were seen as characteristic of the Bankslanders.

During the late 1950s when discretionary income again reached high levels, such spending tended to be channeled into airplane charters, short sprees in Inuvik and the occasional holiday "outside", although such indulgences were not universal amongst the trappers. This type of spending still continues, but for most people is less significant than in former days. It has been partly supplanted by a new sector of expenditure in the last decade: housing, furniture and household goods. The maturation of the Banksland colony has given its inhabitants a more sedate but nonetheless prosperous image.

The white fox resource system was born on the mainland and successfully transplanted to Banks Island. There it found an environment which sustained and developed it well enough to withstand the periodic adversity the years visited upon it. Once it withered badly, and on other occasions wilted, but it clung to life. Today trapping on Banks Island is in good health, but in order to assess its future prospects we must first inspect and diagnose its present condition in detail. We must know not only its morphology and anatomy, but how it functions.

APPENDIX A
HISTORICAL STATISTICS

TABLE A.1

White fox pelt production, Canada, cumulative
by region, 1928-67.

	Canada	N.W.T.	N.W.T. proportion of Canadian total (per cent)	Western Arctic	Western Arctic proportion of Canadian total (per cent)	Herschel- Pearce	Herschel-Pearce proportion of Canadian total (per cent)	Banks Island	Banks Island proportion of Canadian total (per cent)
1928-29	18,572	15,252	82.3	*	—	*	—	480	2.7
1929-30	37,617	35,576	94.7	26,100	69.4	*	—	2,914	7.7
1930-31	71,877	58,768	81.8	9,900	13.8	4,000	5.6	1,886	2.6
1931-32	67,416	41,554	61.7	21,200	31.5	8,400	12.5	1,854	2.8
1932-33	33,385	25,687	76.5	10,200	30.5	6,900	20.7	608	1.8
1933-34	61,400	52,467	85.9	28,900	47.1	11,000	17.9	900	1.5
1934-35	68,366	52,615	76.9	14,100	20.6	7,900	11.5	1,667	2.5
1935-36	45,743	25,897	56.7	18,900	41.4	6,500	14.2	1,462	3.3
1936-37	22,191	19,854	89.6	5,000	22.5	800	3.6	0	0.0
1937-38	55,907	49,255	88.2	14,000	25.0	3,100	3.5	1,648	2.9
1938-39	56,396	42,884	76.1	26,600	47.2	7,800	13.8	6,502	11.5
1939-40	32,535	30,461	93.8	9,500	29.2	1,700	5.2	1,465	4.6
1940-41	48,411	46,497	96.1	21,000	43.4	6,400	13.2	5,479	11.4
1941-42	62,534	50,970	81.6	18,600	29.8	1,200	1.9	0	0.0
1942-43	74,190	60,521	81.5	36,300	48.9	*	—	4,208	5.7
1943-44	30,332	28,310	93.4	11,300	37.3	2,700	8.9	1,861	6.3
1944-45	17,969	16,765	93.3	6,600	36.7	800	4.4	0	0.0
1945-46	27,169	20,854	76.8	*	—	*	—	3,909	14.3
1946-47	67,314	57,750	85.9	26,900	40.0	7,300	10.8	4,800	7.1
1947-48	55,423	53,227	96.0	15,300	27.6	2,400	4.3	2,249	4.0
1948-49	34,775	31,317	92.1	3,900	11.5	800	2.4	0	0.0
1949-50	19,775	9,989	50.5	8,100	40.9	300	1.5	0	0.0
1950-51	52,566	39,739	75.5	32,400	61.6	700	1.3	0	0.0
1951-52	53,654	49,787	92.8	14,600	27.2	8,600	16.0	2,648	4.8
1952-53	40,710	36,474	89.7	6,700	16.5	1,500	3.7	1,199	2.9
1953-54	36,370	27,178	74.7	6,100	16.9	2,700	7.5	1,733	4.7
1954-55	81,783	60,483	73.9	36,100	44.2	10,300	12.6	6,000	7.3
1955-56	31,728	27,720	87.4	15,900	50.0	2,800	9.0	1,045	3.2
1956-57	28,338	24,049	84.9	10,800	38.0	800	2.9	410	1.4
1957-58	31,890	28,939	90.6	13,842	43.4	3,719	11.7	2,871	9.1
1958-59	26,539	23,026	86.8	10,363	39.0	2,382	9.0	1,965	7.5
1959-60	14,457	10,443	71.7	3,607	24.9	1,037	7.2	1,033	7.1
1960-61	51,995	38,462	74.0	23,743	45.7	5,645	10.9	5,625	10.8
1961-62	45,358	32,522	71.6	13,848	30.5	3,586	7.9	2,010	4.4
1962-63	9,880	9,162	92.7	6,742	68.2	4,081	41.3	3,543	35.4
1963-64	32,447	29,920	92.3	14,207	43.8	3,479	10.7	1,985	6.2
1964-65	40,831	27,041	66.2	7,246	17.7	1,837	4.5	1,555	3.9
1965-66	11,656	10,444	88.9	6,313	53.8	3,415	29.1	3,062	25.6
1966-67	34,126	33,185	97.2	22,846	66.9	*	—	9,497	27.8

* Uncertain or unavailable

Notes: Herschel-Pearce: includes all posts on the mainland coast from Demarcation Point to Pearce Point, all Delta posts south to and including Aklavik — Inuvik, plus Banks Island.

Western Arctic: includes all of the Herschel-Pearce region plus all posts on the mainland coast as far east as Spence Bay, plus all posts on Victoria and King William Islands and adjacent small islands.

As the Banks Island figures refer to production, while the others are based on exports, the two are not completely comparable, as not all furs are exported. The difference is small and of little consequence (at least 90-95 per cent of Banksland furs are exported), although it tends to make the Banks Island production slightly higher than it should be, relative to the other regions.

Source: Canada and N.W.T. — D.B.S., *Fur Production of Canada* (Annual); Western Arctic and Herschel-Pearce — Fur Export Tax Returns, Fort Smith, N.W.T. (pre-1957 figures are approximate); Banks Island — Table A.5

TABLE A.2

Legal open seasons for white fox effective on Banks Island,
1917-67

Date effective	Legal open season, opening and closing dates inclusive
20 Sept. 1917	16 Nov. – 31 March
15 May 1929	2 Nov. – 14 March
20 Nov. 1929	16 Nov. – 30 March
22 July 1943	1 Nov. – 31 March
13 Dec. 1951	16 Nov. – 31 March
9 Feb. 1955	16 Nov. – 15 April
2 April 1962	1 Nov. – 15 April

Prior to the Northwest Game Act, assented to 20 Sept. 1917, there was no close season on fox in the N.W.T. Subsequent amendments to the Act were effected by Order in Council, and, after it was superseded on 1 July 1949 by the Game Ordinance of the N.W.T., by the Commissioner of the N.W.T.

These seasons also applied to blue fox and, usually, to coloured fox, and covered all of the N.W.T. north of the timberline, or in some cases, the Arctic Circle.

TABLE A.3

Length of residence on Banks Island, by place of origin

Years Wintered	Place of Origin					
	Delta	Herschel- Tuktoyaktuk	Baillie I. district	Victoria I.	Banks I.	Unknown
1	15	1	5	6	2	3
2	1	3	4		1	
3	2		7			
4	3	2	4	2		
5			2			
6	1	2	3		1	
7			1			
8	2		2			
9	1		1	1		
10			1			
11	1		1	1	1	
12					1	
13		1	1	1	1	
14			1			
15	1					
16			1			
17	1			1		
18			1			
28			1			
Number of trappers	28	9	36	11	8	3
Total years or resi- dence	109	42	220	47	63	3
Mean number of years	3.9	4.7	6.1	4.3	7.9	1.0
						5.1

Source: field investigations.

TABLE A.4

Number of full time trappers wintering on Banks Island.
by year and by campsite, 1928-1967.

	Masik River	Sachs Harbour	Mary Sachs	Blue Fox Harbour	Lennie Harbour Big Bluff	Siksik Point	Sea Otter Harbour	North Star Harbour	Storkerson Bay	Satsik River	De Salis Bay	Nokaluk-Coal Mine	Jesse Bay	Total
1928-29			4											4
1929-30	5	4			2									11
1930-31		1		2			6				6			15
1931-32		4					3			6				13
1932-33				7		4	5							16
1933-34					5									5
1934-35	4	2									3	4		13
1935-36		6		2		2	2				1		4	17
1936-37	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1937-38	4	2					2	2			4		2	16
1938-39		3		1			3	2		2	4			15
1939-40		3		1	2		6							12
1940-41		7					3			4				14
1941-42	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1942-43		8		9							3		4	24
1943-44		10			3	3	11							27
1944-45	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1945-46		5			2		7		3	4				21
1946-47		9					1				5			15
1947-48		24											3	27
1948-49	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1949-50	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1950-51	—	—	—	—	—	—	—	—	—	—	—	—	—	0
1951-52		3			4		2							9
1952-53		7			2									9
1953-54		6					4							10
1954-55		5					4				4	3	4	20
1955-56		8												8
1956-57		4												4
1957-58		6									3			9
1958-59		7					3				5			15
1959-60		9			1		2		3					15
1960-61		16									1			17
1961-62		20												20
1962-63		17												17
1963-64		18												18
1964-65		17												17
1965-66		16												16
1966-67		15												15

Source: field investigations.

TABLE A.5
White fox pelt production, Banks Island, 1928-67

	trappers (full time)	recorded catches	recorded trapslines	recorded catch	projected catch ^a	average catch (based on projected catch)	part time trappers and their projected catch
1928-29	4	4	4	480	480	120	
1929-30	11	10	11	2,814	2,914	265	
1930-31	15	11	2	1,411	1,886	126	
1931-32	13	8	6	1,504	1,854	143	
1932-33	16	6	2	230	608	38	
1933-34	5	4	0	842	900	180	
1934-35	13	9	3	1,217	1,667	128	
1935-36	17	9	5	777	1,462	86	
1936-37	0						
1937-38	16	12	11	1,235	1,648	103	
1938-39	13	13	13	6,352	6,502	433	
1939-40	12	10	6	1,315	1,465	122	
1940-41	14	14	14	5,479	5,479	391	
1941-42	0						
1942-43	24	18	14	3,758	4,208	175	
1943-44	27	14	12	1,311	1,861	69	
1944-45	0						
1945-46	21	16	8	3,384	3,909	186	
1946-47	15	14	10	4,581	4,800	320	
1947-48	27	20	14	1,959	2,234	83	4/15
1948-49	0						
1949-50	0						
1950-51	0						
1951-52	9	9	2	2,648	2,648	294	
1952-53	9	9	4	1,199	1,199	133	
1953-54	10	9	7	1,508	1,733	173	
1954-55	20	18	9	5,915	6,000	300	
1955-56	8	7	4	966	1,030	129	2/15
1956-57	4	4	3	391	391	98	1/19
1957-58	9	8	5	2,436	2,741	305	3/130
1958-59	15	10	9	1,415	1,940	129	2/25
1959-60	15	8	9	593	1,018	68	2/15
1960-61	17	17	17	5,470	5,470	322	4/155
1961-62	20	20	16	1,980	1,980	99	3/30
1962-63	17	17	17	3,425	3,425	201	3/118
1963-64	18	16	18	1,857	1,982	110	3/3
1964-65	17	17	17	1,543	1,543	91	3/12
1965-66	16	16	16	2,978	2,978	186	6/84
1966-67	15	15	15	8,646	8,646	576	6/851

^aThe projected catch is the sum of the recorded catch of each trapper plus the estimated catch of those trappers for whom there is no record. The estimate is based on several factors regarding the location, skill, and capital equipment of the trapper, plus the relative abundance during the season in question, and/or recorded estimates of the total catch.

Source: General Hunting Licence Returns, Fort Smith, N.W.T.;
IA&ND/NAB 1000/176; field investigations.

TABLE A.6

Earnings from white, fox, Banks Island, 1928-67.

	Estimated price received per pelt	Value of Banks Island catch	Ave. income per trapper	Highest individual income
1928-29	\$65.00	\$ 31,200	\$ 7,800	\$ 9,000
1929-30	45.00	131,130	11,925	23,715
1930-31	25.00	47,150	3,575	5,500
1931-32	16.00	29,664	2,288	6,400
1932-33	22.00	13,376	836	1,364
1933-34	20.00	18,000	3,600	6,000 ^a
1934-35	17.00	28,339	2,176	5,627
1935-36	17.00	24,854	1,462	2,890
1936-37		nil		
1937-38	13.00	21,424	1,339	3,263
1938-39	11.00	71,552	4,763	14,300
1939-40	11.00	16,115	1,342	2,816
1940-41	25.00	136,975	9,775	15,300
1941-42		nil		
1942-43	31.00	130,448	5,425	13,175
1943-44	35.00	65,135	2,415	11,375
1944-45		nil		
1945-46	25.00	97,725	4,650	10,000
1946-47	18.00	86,400	5,760	14,256
1947-48	12.00	26,808	996	2,400
1948-49		nil		
1949-50		nil		
1950-51		nil		
1951-52	8.50	22,508	2,499	3,927
1952-53	11.00	13,189	1,463	2,926
1953-54	12.00	20,796	2,076	3,060
1954-55	14.00	84,000	4,200	8,484
1955-56	18.00	18,540	2,322	3,960
1956-57	21.00	8,211	2,058	2,751
1957-58	20.00	54,820	6,100	10,560
1958-59	25.00	48,500	3,225	7,500
1959-60	37.00	37,666	2,516	4,329
1960-61	28.00	160,720	9,016	16,912
1961-62	16.00	31,680	1,584	3,312
1962-63	22.00	75,350	4,422	8,162
1963-64	24.01	47,578	2,643	6,338
1964-65	13.22	20,403	1,200	2,200
1965-66	22.05	65,673	4,105	10,500
1966-67	22.84	181,266	12,084	21,000

^aOne Banksland trapper forced to winter at Walker Bay made \$8,300.

Note: Prices and earnings given in contemporary unadjusted dollars.

Source: Table A.5, IA&ND/NAB 1000/176, field investigations.

TABLE A.7
Indices for consumer prices (Canada) and pelt values (N.W.T.),
1925-67 (1949 = 100).

	Consumer prices (Canada)		Pelt values (N.W.T.)	
	All items	Food	White fox	Muskrat
1925-26	75.8	66.9	356.1	108.3
1926-27	74.5	65.7	508.0	145.0
1927-28	74.8	65.9	477.3	110.8
1928-29	75.7	67.5	615.3	100.0
1929-30	75.2	65.9	372.8	25.8
1930-31	67.8	51.7	252.0	57.5
1931-32	61.6	43.0	159.5	35.8
1932-33	58.7	42.5	221.7	45.8
1933-34	59.5	46.3	203.9	75.0
1934-35	59.9	47.2	174.0	95.8
1935-36	61.1	48.8	174.0	95.8
1936-37	63.0	51.4	147.7	102.5
1937-38	63.7	51.7	131.5	49.2
1938-39	63.2	50.2	126.4	65.8
1939-40	65.7	52.6	93.6	71.7
1940-41	69.6	57.9	207.6	122.5
1941-42	72.9	63.4	293.8	164.2
1942-43	74.2	65.2	318.2	183.3
1943-44	74.6	65.5	366.5	98.3
1944-45	75.0	66.3	409.1	187.5
1945-46	77.5	70.0	244.3	229.2
1946-47	84.8	79.5	153.4	125.0
1947-48	97.0	97.5	125.0	191.7
1948-49	100.0	100.0	100.0	100.0
1949-50	102.9	102.6	73.9	100.0
1950-51	113.7	117.0	130.3	167.5
1951-52	116.5	116.8	88.5	92.5
1952-53	115.5	112.6	95.2	80.0
1953-54	116.2	112.2	116.9	55.8
1954-55	116.4	112.1	109.0	60.0
1955-56	118.1	113.4	147.2	64.2
1956-57	121.9	118.6	187.5	62.5
1957-58	125.1	122.1	173.4	40.0
1958-59	126.5	121.1	223.1	50.0
1959-60	128.0	122.2	284.1	50.0
1960-61	129.2	124.0	227.3	45.8
1961-62	130.7	126.2	114.2	57.5
1962-63	133.0	130.3	163.3	90.0
1963-64	135.4	132.4	170.2	90.0
1964-65	138.7	136.9	104.9	80.8
1965-66	143.9	144.5	176.7	110.0
1966-67	149.0	146.4	177.8	53.3

Source: Canada, D.B.S., *Consumer Price Index for Canada (weighted 1947-48)* and *Fur Production, annual*). The consumer price index is calculated on a calendar year basis and is entered here with the fur year ending in the middle of the price year, i.e. 1966-67 fur index corresponds to 1967 price index.

APPENDIX B
ABORIGINAL OCCUPANCY OF BANKS ISLAND

APPENDIX B

Aboriginal Occupancy of Banks Island

The earliest known inhabitants of Banks Island were Pre-Dorset peoples. Two sites excavated by Taylor in 1965 near the southwest shore of Shoran Lake (73°38'N, 119°45'W) revealed a variety of stone tools and animal bones (Taylor, 1967:227-228). Two radiocarbon dates from the Uningmak Site indicate that it was probably occupied during the 15th century B.C. (personal communication, R. Wilmeth, National Museum of Canada, 27 Oct. 1970). Examination of the refuse bones indicated that fully 85 per cent were muskox, with the remainder consisting chiefly of caribou and birds, but also including fox and hare. Subsequently there is a gap in the evidence of human occupancy of almost 3000 years, due more likely to the paucity of archaeological investigation on the Island than to the actual absence of man for such a lengthy period.¹

Thule house ruins found at Cape Kellett, Cape Cardwell, near Nelson Head and near the Fish Lakes, indicate that Eskimos were living on Banks Island 500 to 600 years ago (Manning, 1956:24-26). Macpherson has suggested that if all known houses were occupied contemporaneously there may have been a population of about 150 Eskimos along the southwest and southeast coasts (1959:23). Although the bulk of the population may have lived in this southern area, M'Clure's expedition discovered ancient Eskimo remains on the north shore at Ballast Beach and Mottley Island, as well as on the east shore near and on the Princess Royal Islands (Armstrong, 1857, Miertsching, 1967 and Osborn, 1856, various refs.). These Thule Eskimos were primarily whale hunters, indicating that the range of the bowhead whale extended somewhat further north and east than presently. The date and causes of the abandonment of Banks Island are not clear, but one may assume that it was part of the general Eskimo withdrawal from the High Arctic occasioned by the onset of severer climatic conditions in the 17th century (Taylor, 1965:11).

The first European expeditions to Banks Island, and indeed the only ones during the 19th century, were those of M'Clure and Collinson (1850-1853). Neither found any sign of recent Eskimo inhabitation, and concluded from the antiquity of the remains they did find that the Eskimos had abandoned the Island many years previously.

M'Clure and Miertsching met the Walker Bay Eskimos of Victoria Island in June, 1851, near Berkeley Point. Unfortunately the visit was hasty and the amount of information obtained from the Eskimos limited. The Eskimos were asked to draw a map of the country to the south, which they apparently did quite ably. They did not know of any people to the north or west, and by inference, for this is not clearly stated in the accounts, they had little or no knowledge of Banks Island (Manning, 1956:27). Collinson, who met the Walker Bay Eskimos the following season, also

¹Shoran Lake was visited by a German-Canadian archaeological expedition during the summer of 1970, but no information on this field work was available at the time of writing.

states that these were the northernmost peoples in the area. As Manning has concluded, "there is a strong presumption that Banks Island was uninhabited at the time of M'Clure's and Collinson's expeditions, and probably had not been inhabited for many years previously" (1956:33).

Yet the possibility of occasional or even seasonal use of at least southeastern Banks Island and perhaps a greater area cannot be entirely discounted. One curious circumstance stands out. M'Clure's *Investigator* was discovered at Mercy Bay by Eskimos within a few years of its abandonment (Stefansson, 1921:240). This discovery is generally attributed to the Walker Bay Eskimos, yet it is difficult to account for it given their supposed unfamiliarity with Banks Island. The discovery of the M'Clure depot on the Princess Royal Islands (Manning, 1956:35) is more easily explained since the Walker Bay Eskimos, although failing to come there in 1852 at Collinson's invitation, knew that something was there, and knew the direction. But this "northernmost tribe" could have had no clue whatever that the *Investigator* was then wintering in Mercy Bay, nor that it had been subsequently abandoned there.

Mercy Bay is over one hundred miles in a direct line from the Princess Royal Islands, and much further by the coast. It is possible that the discovery of M'Clure's depot impelled them to seek further for such valuable remains. Such a search would have been blind, however, since they had no idea where to look next. A wideranging search over totally unfamiliar country seems unlikely. Rather the discovery of the *Investigator* is more easily explained if one assumes either a greater knowledge of Banks Island on the part of the Eskimos than was indicated to M'Clure or Collinson, or the existence of at least a few people on Banks Island who may have come upon the wreck and somehow communicated this discovery to other people. In view of the evidence, the former seems more likely.

Whatever the explanation, there is no doubt that the discovery of the *Investigator* led to a greatly increased occupancy and use of Banks Island during the latter half of the 19th century. The *Investigator* and its cargo offered two extremely valuable resources to the Eskimos: iron and soft wood. Stefansson estimated that the wreck was found within six years of its abandonment, and that during the next twenty or thirty years perhaps 1,000 Eskimos visited it (Stefansson, 1921:240-41). It is not clear, however, whether he meant 1,000 different Eskimos or counted the same ones on repeated visits, although he implies that other Eskimos from a considerable distance south and east came to utilize the wreck. Probably the last visit to Mercy Bay was around 1890 (ibid:361), the store of wood and iron presumably having been exhausted. By the time Stefansson visited the area in 1911, the Walker Bay people apparently visited only southeastern Banks Island, and then only in the late winter months (Stefansson, 1913b:281; 1921:287).

During the fifty or so years prior to Stefansson's visit to Victoria Island, certain patterns of Eskimo utilization of Banks Island had evolved, and to some degree, lapsed. It is not known how many parties, and of what size, visited the Island at any given time during the late 19th century, or how long each party tended to stay. Most likely they spent at least one season at a time, because there is evidence of summer camps in the Mercy Bay area (Stefansson, 1921:367) and elsewhere, and that they ranged widely over the Island.

Stefansson deduces from the evidence of camps seen that the diet of visiting parties consisted of muskoxen, geese and caribou, in that order of importance (ibid: 367). Certainly they must have travelled over much of the eastern and north-central parts of the Island to reach the *Investigator*, and the consumption of geese indicates that they must have roamed as far south and west as Storkerson River, or more likely, to the main nesting grounds at Egg River.

What had happened to the Eskimos who visited or lived on Banks Island during this time is not certain. Stefansson was told in 1911, by an old man in Prince Albert Sound, who remembered the Collinson expedition, that,

“There were numerous people once resident in Banks Island summers, and on the ice near it winters. These are all dead — some of hunger in (or near) Banks Island and the last party on the ice of the mouth of Prince Albert Sound — these last died ‘because they had no food for their stomachs and because they had no oil (for fuel) to make water with.’ ” (Stefansson, 1913b:288).

This Eskimo also related that,

“The Banks Island people used to be well off. They killed so many deer and (musk) oxen that their dried meat sometimes lasted the year round. They got to killing each other. One man killed had relatives in the Sound. For this reason (i.e., because of witchcraft practised by the dead man’s relatives in the Sound) food became scarce (in Banks Island); there were no seals for food or fuel and the people died of hunger—those that had not been murdered in the feuds. This happened some fifteen years ago — i.e., when Aglerioittok (who is now about twenty-five) was a boy but (after) his two brothers (were) grown up.” (ibid.: 289-90).

William Kuptanna, an old man from Victoria Island now residing at Sachs Harbour, recalls stories from his youth about people who lived on Banksland before he was born. He understood that these people did not live exclusively on Banks Island, but moved back and forth across Prince of Wales Strait (personal communication, 14 April, 1967).

In view of the fact that by 1911 the original Minto Inlet group had dwindled to three families (Stefansson, 1913b:288), the inference could be made that most of the Minto Inlet people moved to Banks Island after 1850, and formed this “lost tribe”, or at least the main, more permanent, core of it.¹ As Manning suggests (1956:34), the absence of any Eskimo name for the Banks Island group in Stefansson’s accounts strengthens this notion. The northern Ugyugligmiut (and their exploits) of whom Stefansson was told by the old man at Prince Albert Sound (1913b:287-88) are almost certainly mythical or were confused in memory with some other group.

¹In the winter of 1915-16, about half of the Kanghiryuarmiut, who generally wintered around the mouth of Prince Albert Sound, went north to join the Kanghiryuatjagmiut in Minto Inlet (Jenness, 1922:41). It is not certain if this union lasted, but the Minto Inlet group which centred about the Holman Island — Walker Bay area in the 20th century (some of whose members moved to Banks Island in recent years), was almost certainly a combination of the two original groups.

The disappearance of the Banks Island Eskimos may most probably be attributed to starvation. The muskox herds, which provided the main source of meat, were virtually exterminated. Caribou do not seem to have been plentiful, at least in the late 19th century, according to Stefansson's observations of animal bones at campsites, and Kuptanna's recollections of the stories told to him. The lack of animal fats for fuel must also have been an important factor, as seals are not known to be plentiful along the northern and eastern shores of the Island.

A more complete reconstruction of the pattern of occupancy of the Island, and the resultant alteration of the environment, remains a subject for future research. Archaeological investigation of the myriad temporary campsites on the Island, and the dating of animal bones, especially of the numerous piles of muskoxen skulls, will greatly augment the presently available evidence. However, two important points are clear: that the northern Victoria Islanders gained a wide knowledge of Banks Island as a potential habitat, and that during the latter part of the 19th century they decimated the muskox herds of the Island almost to the point of extinction.

In sum, Banks Island has been inhabited at least sporadically for about 3,500 years. The first occupants were Pre-Dorset peoples and the second known group was the Thule Eskimos, although others may have inhabited the Island in between. The first European explorers in 1850 found no evidence of recent Eskimo inhabitation, but the Walker Bay Eskimos ranged widely across the Island during the latter half of the 19th century, and continued using parts of it into the 20th century, right up to the arrival of the Canadian Arctic Expedition in 1914.

BIBLIOGRAPHY¹

References

Abrahamson, G. et. al.

- 1964 *The Copper Eskimos, an Area Economic Survey, 1963*. Department of Northern Affairs and National Resources, Industrial Division, Ottawa.

Alaska Review of Business and Economic Conditions.

- 1966 "The Fur Industry in Alaska." 3(4).

Anders, G. (ed.)

- 1967 *The East Coast of Baffin Island*. Department of Indian Affairs and Northern Development, Industrial Division, Ottawa.

Armstrong, Alexander

- 1857 *A Personal Narrative of the Discovery of the Northwest Passage*. London.

Bernier, J.E.

- 1910 *Report on the Dominion of Canada Government Expedition to the Arctic Islands and Hudson Strait on Board the D.G.S. "Arctic"*. Ottawa.

Black, W.A.

- 1961 "Fur Trapping in the Mackenzie River Delta", *Geographical Bulletin*, 16:62-85.

Blishen, Bernard

- 1958 "The Construction and Use of an Occupational Class Scale", *Canadian Journal of Economics and Political Science*, 24(4): 519-531.
- 1967 "Socio-Economic Index for Occupations in Canada", *Canadian Review of Sociology and Anthropology*, 4(1): 41-53.

Bodfish, H.H.

- 1936 *Chasing the Bowhead*. Cambridge, Mass.

¹This bibliography is divided into two sections. The first is a list of works referred to in the text. The second is a list of additional sources which have been of assistance but are not specifically cited. It is not a comprehensive bibliography of any particular place or subject.

Brack, D.M.

- 1962 *Southampton Island Area Economic Survey*. Department of Northern Affairs and National Resources, Industrial Division, Ottawa.

Brack, D.M., and D. McIntosh

- 1963 *Keewatin Mainland Area Economic Survey and Regional Appraisal*. Department of Northern Affairs and National Resources, Industrial Division, Ottawa.

Braestrup, F.W.

- 1941 *A Study on the Arctic Fox in Greenland*. Meddelelser om Grønland 131(4), Copenhagen.

Buckley, Helen

- 1962 *Trapping and Fishing in the Economy of Northern Saskatchewan*. Report no. 3, Economic and Social Survey of Northern Saskatchewan, Research Division, Centre for Community Studies, University of Saskatchewan, Saskatoon.

Buckley, J.L.

- 1954 "Animal Population Fluctuations in Alaska, a History", *Trans. Nineteenth North American Wildlife Conference*: 338-357.

Canada, Dominion Bureau of Statistics.

- 1919-68 *Fur Production of Canada*. Agriculture Division, Ottawa.
- 1961a *Census of Canada*. Labour Force, Occupations by Sex, Canada and Provinces. Bull. 3.1-3.
- 1961b *The Consumer Price Index for Canada (1949 = 100), (Revision Based on 1957 Expenditures)*. Prices Division, Ottawa.
- 1964-68a *Trade of Canada, Exports by Commodities*. External Trade Division, Ottawa.
- 1964-68b *Trade of Canada, Imports by Commodities*. External Trade Division, Ottawa.

Canada, Royal Canadian Mounted Police.

- 1929 *Annual Report*, Ottawa.
- 1930 *Annual Report*, Ottawa.
- 1932 *Annual Report*, Ottawa.
- 1943 *Annual Report*, Ottawa.

Canada, Royal Northwest Mounted Police.

1905 *Annual Report*, Ottawa.

1919 *Annual Report*, Ottawa.

Chesemore, David

1964? *Ecology and Economic Importance of the White Fox*. Alaska Wildlife Investigations, Wildlife Research Unit Studies. Fairbanks? Unpublished.

Collinson, Richard

1889 *Journal of H.M.S. Enterprise on the Expedition in Search of Sir John Franklin's ships by Behring Strait, 1850-55*. (ed. T.B. Collinson), London.

Cooley, Richard A.

1963 *Politics and Conservation, the Decline of the Alaska Salmon*. New York.

Daniloff, D.N.

1959 "Method of Investigating Productivity of Trapping Areas" *Translations of Russian Game Reports*, Vol. 6, Department of Northern Affairs and National Resources, Canadian Wildlife Service, Ottawa: 54-83.
Translated from *Voprosy Biologii Pushnykh Zverey i Tekhniki Okhotnich'yego Promysla*, 11, Moscow, 1951.

Donnelly, C.B.C.

1943 *Report on Areas of Yukon Territory and Northwest Territories (District of Mackenzie) Visited in 1943 in Connection with Program of Astronomical Map Control, Required for Preparation of Air Navigation Charts*. Department of Mines and Resources, Geodetic Service, Ottawa. Unpublished.

Dunbar, Moira & K.R. Greenaway

1956 *Arctic Canada from the Air*. Ottawa.

Dunning, R.W.

1959a *Social and Economic Change Among the Northern Ojibwa*. Toronto.

1959b "Ethnic Relations and the Marginal Man in Canada", *Human Organization*, 18(3): 117-122.

Findlay, Marjorie C.

1955 *The Means of Improving the Economic Situation of the Ungava Bay Eskimos*. Ph.D. thesis in geography, unpublished, McGill University, Montreal.

Firey, Walter

- 1960 *Man, Mind and Land*. Glencoe, Illinois.

Foote, Don C.

- 1965 *Exploration and Resource Utilization in Northwestern Arctic Alaska Before 1855*. Ph.D. thesis in geography, unpublished, McGill University, Montreal.
- 1967a "Recent Area Economic Surveys in Northern Canada", *Inter-Nord*, 9:213-14.
- 1967b *The East Coast of Baffin Island N.W.T. an Area Economic Survey*, 1966. Submitted to the Industrial Division, Department of Indian Affairs and Northern Development, Ottawa, in accordance with contract No. 251-1/170. Unpublished.

Foote, D.C. and H.A. Williamson

- 1966 "A Human Geographical Study", in N.J. Wilimovsky and J.N. Wolfe, (eds), *Environment of the Cape Thompson Region, Alaska*, Oak Ridge, Tennessee: 1041-1107.

Fuchs, V.R.

- 1957 *Economics of the Fur Industry*. New York.

Geller, M. Kh. and V.D. Skrobov

- 1968 "Methods of Developing and Increasing the Productivity of the Fur Industry in the Far North", *Problems of the North*, 11, 1968: 19-45. Translated from *Problemy Severa*, 11, Moscow, 1967.

Goodhart, James and Thomas Wright

- 1958 "North-East Greenland Expedition, 1956", *The Wildlife Trust, Ninth Annual Report, 1956-57*. London: 180-192.

Haller, A.A.

- 1967 *A Human Geographical Study of the Hunting Economy of Cumberland Sound, Baffin Island*. M.A. thesis in geography, unpublished, McGill University, Montreal.

Jenness, D.

- 1922 *The life of the Copper Eskimos*. Report of the Canadian Arctic Expedition, 1913-18, Southern Party, 1913-16, Vol. XII, Pt.A, Ottawa.
- 1964 *Eskimo Administration: II. Canada*. Arctic Institute of North America, Technical Paper no. 14, Montreal.

Jenness, John L.

- 1953 "The Physical Geography of the Waters of the Western Canadian Arctic", *Geographical Bulletin*, 4:33-64.

Kaminsky, Ralph

- 1947 *The Conservation and Rehabilitation of Fur in Manitoba*. Department of Mineralogy and Natural Resources, Game and Fisheries Branch, Winnipeg. Unpublished.

Kew, J.E.M.

- 1962 *Cumberland House in 1960*. Report No. 2, Economic and Social Survey of Northern Saskatchewan, Research Division, Centre for Community Studies, University of Saskatchewan, Saskatoon.

Knight, Rolf

- 1968 *Ecological Factors in Changing Economy and Social Organization among the Rupert House Cree*. National Museum of Canada, Anthropology Paper no. 15, Ottawa.

Lantis, Margaret

- 1954 "Problems of Human Ecology in the North American Arctic", *Arctic*, 7(3&4): 307-320.

Lavrov, N.P.

- 1940 *The Arctic Fox*. All-Union Fur Association, "Soyuspushnina" (Union Furriery). Popular Scientific Library Series: Fur Bearing Animals of the U.S.S.R. (ed. B.M. Zhitkov), No. 11, Moscow, 1932. Translated by J.D. Jackson, for the Bureau of Animal Population, Oxford. F1079A, Trans. 18.

Lee, Richard, A.

- 1968 "What Hunters Do For a Living, or How to Make Out on Scarce Resources", in A.B. Lee and I. DeVore (eds.), *Man the Hunter*, Chicago: 30-48.

Loughrey, A.G.

- 1961 "The Economics of the Fur Industry in Canada", in *Resources for Tomorrow, Conference Background Papers*, Vol. 2, Ottawa: 845-856.

Macpherson, A.H.

- 1959 *A Preliminary Survey of Arctic Wildlife Resources*. Canadian Wildlife Service, Ottawa. Mimeo.

- 1964 "A Northward Range Extension of the Red Fox in the Eastern Canadian Arctic", *Journal of Mammalogy*. 45(1): 138-140.
- Manning T.H.
- 1953 "Narrative of an Unsuccessful attempt to Circumnavigate Banks Island by Canoe in 1952, *Arctic*, 6(3): 171-197.
- 1956 "Narrative of a Second Defence Research Board Expedition to Banks Island, with Notes on the Country and its History" *Arctic*, 9(1&2): 3-77.
- McEwen, E.H.
- 1956 *Canis lupus bernardi* Anderson, *Banks Island Wolf*. Canadian Wildlife Service, C.W.S.C. 23, Ottawa. Unpublished.
- Metayer, M. (ed.)
- 1966 *I, Nuligak*. Toronto.
- Miertsching, Johann
- 1967 *Frozen Ships – The Arctic Diary of Johann Miertsching, 1850-1854*. Translated by L.H. Neatby. Toronto.
- Mikkelsen, Ejnar & P.P. Sveistrup
- 1944 *The East Greenlanders Possibilities of Existence, Their Production and Consumption*. Meddelelser om Grønland, 134(2), Copenhagen.
- Norges Svalbard og Ishaus – Undersøkelser
- 1929 *Jan Mayen; en Oversikt Over øens Natur, Historie og Betydning*. Norsk Geografisk Tidsskrift, Bd. 2:411-444.
- Osborn, Sherard (ed.)
- 1857 *The Discovery of the Northwest Passage by H.M.S. "Investigator"*. London.
- Quick, H.F.
- 1950 *The Fur Resources of a Wilderness Region in British Columbia*. Arctic Institute of North America, Project ONR 6. Unpublished.
- Robinson, M.J. and J.L. Robinson
- 1946 "Fur Production in the Northwest Territories", *Canadian Geographical Journal*, 32(1): 34-48.

Romanov-Il'inskii, S.

- 1958 "Tolariinyi Promysel Pestsa na IAmale", ("Tolara" Arctic Fox Hunting on Yamal), *Okhota i Okhotnich'e khoziaistvo*, 4(12):11 (*Arctic Bibliography*, abstract 54377).

Saario, Doris & B. Kessel

- 1966 "Human Ecological Investigations at Kivalina", in N.J. Wilimovsky and J.N. Wolfe, (eds.) *Environment of the Cape Thompson Region, Alaska*, Oak Ridge, Tennessee: 969-1039.

Shimkin, D.B.

- 1955 "The Economy of a Trapping Center: The Case of Fort Yukon, Alaska", *Economic Development and Cultural Change*, 3(3): 219-240.

Skrobov, V.D.

- 1955 "Dobycha Pestsa Zagonom s Primeneniiem Seti", (Polar Fox Hunting by Driving and Use of Nets), *Ratsionalizatsiia Okhotnich'ego Promysla*, 3:22-29. (*Arctic Bibliography*, abstract 61710).
- 1960 "O Vzaimootnosheniiakh Pestsa i Lisitsy v Tundrach Nenetskogo Natsional' nogo Okruga" (Interrelations Between the Polar and the Common Fox in the Tundra of the Nenets National District), *Zoologicheskii Zhurnal*, 39(3): 469-471. (*Arctic Bibliography*, abstract 68333).

Sonnenfeld, J.

- 1957 *Changes in Subsistence Among the Barrow Eskimo*. Ph.D. thesis in geography, unpublished, John Hopkins University, Baltimore.

Stager, J.K.

- 1962 "Fur Trading Posts in the Mackenzie Region up to 1850", *Occasional Papers in Geography*, Canadian Association of Geographers, B.C. Division: 37-46.
- 1967 "Fort Anderson: The First Post for Trade in the Western Arctic", *Geographical Bulletin*, 9(1): 45-56.

Stefansson, V.

- 1913a "The Distribution of Human and Animal Life in Western Arctic America", *Geographical Journal*, 41:449-60.

1913b *My Life with the Eskimo*. New York.

1919 *The Stefansson-Anderson Arctic Expedition of the American Museum: Preliminary Ethnological Report*. Anthropological Papers of the American Museum of Natural History, 14, New York.

1921 *The Friendly Arctic*. New York.

Syroechkovskii, E.E.

1968 "Bioeconomic Regionalization of the Yenesei North as a Geographic Basis for Locating and Organizing Northern Industries", *Problems of the North*, 11:47-72. Translated from *Problemy Severa*, 11, Moscow, 1967.

Tanner, Vaino

1944 *Outlines of the Geography, Life and Customs of Newfoundland – Labrador (The Eastern Part of the Labrador Peninsula)*. Acta Geographica 8, Helsinki.

Taylor, W.E., Jr.

1965 "The Fragments of Eskimo Prehistory", *Beaver*, Outfit 295: 4-17.

1967 "Summary of Archaeological Fieldwork on Banks and Victoria Islands, Arctic Canada, 1965" *Arctic Anthropology*, 4(1): 221-243.

Tchirkova, A.F.

1958a "Experiment in Mass Visual Census and Forecasting Harvest of Arctic Foxes (1944-49)", *Translations of Russian Game Reports*, Vol. 3, Department of Northern Affairs and National Resources, Canadian Wildlife Service, Ottawa: 101-165. Translated from *Voprosy Biologii Pushnykh Zverey*, 14, Moscow, 1955.

1958b "A Preliminary Method of Forecasting Changes in Numbers of Arctic Foxes", *Translations of Russian Game Reports*, Vol. 3, Department of Northern Affairs and National Resources, Canadian Wildlife Service, Ottawa: 24-29. Translated from *Voprosy Biologii Pushnykh Zverey i Tekhniki Okhotnich'yego Promysla*, 11, Moscow, 1951.

Thorsteinsson, R. and E.T. Tozer

1962 *Banks, Victoria and Stefansson Islands, Arctic Archipelago*. Geological Survey of Canada, Memoir 330, Ottawa.

Toronto Star Weekly

- 1927 "Aklavik, Capital of Canada's Western Arctic", 19 February:
24, 31.

Urquhart, M.C. and K.A.H. Buckley

- 1965 *Historical Statistics of Canada*. Cambridge.

Usher, Peter J.

- 1965 *Economic Basis and Resource Use of the Coppermine – Holman Region, N.W.T.* Department of Northern Affairs and National Resources, Northern Co-ordination and Research Group, NCRC-65-2, Ottawa.

- 1966 *Banks Island, an Area Economic Survey, 1965*. Department of Northern Affairs and National Resources, Industrial Division, Ottawa.

- in press "The Canadian Western Arctic – A Century of Change" J. & P. Lotz (eds.). *Pilot, Not Commander: Essays in Memory of Diamond Jenness*.

de Vos, A. et. al.

- 1959 *Biological Investigations of Traplines in Northern Ontario, 1951-56*. Department of Lands and Forests, Technical Bulletin, Wildlife Series No. 8, Toronto?

Williams, C.E.

- 1966 "A Map of the Wild Fur Harvest in Anglo-America", *Journal of Geography*, 65(8): 377-383.

Zaslow, Morris

- 1957 *The Development of the Mackenzie Basin, 1920-40*. Ph.D. thesis in history, unpublished, University of Toronto, Toronto.

Additional Sources

Bethune, W.C.

- 1937 *Canada's Western Northland*. Department of Mines and Resources, Lands, Parks and Forests Branch, Ottawa.

Burns, D.H.

- 1966 "Canadian Fur Overseas", *North*, 13(2): 35-36.

Burwash, L.T.

- 1931 *Canada's Western Arctic*. Department of the Interior, N.W.T. and Yukon Branch, Ottawa.
- n.d. *Report of Exploration and Investigation along Canada's Arctic Coastline from the Delta of the Mackenzie River to Hudson Bay, 1925-26*. Department of the Interior, N.W.T. and Yukon Branch, Ottawa. Unpublished.

Canada, Royal Canadian Mounted Police

- 1945 *Reports and Other Papers Relating of the Two Voyages of the R.C.M. Police Schooner "St. Roch" through the Northwest Passage*. Ottawa.

(Cantley, James)

- (1950) *The Cantley Economic Report on Eskimo Affairs*. (Ottawa). Unpublished.

Cook, John A.

- 1926 *Pursuing the Whale: a Quarter Century of Whaling in the Arctic*. London.

Fortune

- 1936 "Furs", 13(1): 64-74, 120-23.

Franklin, John

- 1828 *Narrative of a Second Expedition to the Shores of the Polar Sea*. London.

Gillingham, D.W.

- 1955 *Umiak*. London.

Hare, Lloyd, C.M.

- 1960 *Salted Tories: The Story of the Whaling Fleets of San Francisco*. Marine Historical Association, Mystic, Connecticut.

Hargrave, M.R.

- 1965-66 "Changing Settlement Patterns Amongst the Mackenzie Eskimos of the Canadian North Western Arctic", *Albertan Geographer*, 2:25-30.

Harrison, A.H.

- 1908 *In Research of a Polar Continent*. London.

Helm, J. and D. Damas

- 1963 "The Contact-Traditional All-Native Community of the Canadian North", *Anthropologica*, 5:9-21.

Hohn, E.O.

- 1954 "In the Home of the Snow Goose", *Beaver*, Outfit 285:8-11.
1955 "Arctic Schooner Voyage", *Beaver*, Outfit 286:24-27.

Hooper, William Hulme

- 1853 *Ten Months Among the Tents of the Tuski*. London.

Hourde, R.N.

- 1952 "Sophisticated Eskimos", *Beaver*, Outfit, 283:36-37.

Innis, H.A.

- 1956 *The Fur Trade in Canada*. Toronto. (Rev. ed.).

Jenness, Diamond

- 1918 "The Eskimos of Northern Alaska: A Study in the Effect of Civilization", *Geographical Review*, 5(2): 89-101.
1957 *Dawn in Arctic Alaska*. Minneapolis.

Larsen, H.A.

- 1967 *The Big Ship*. Toronto.

MacFarlane, R.

- 1890-91 "On an Expedition down the Beghula or Anderson River", *Canadian Record of Science*, 4:28-53.
1905 "Notes on Mammals Collected and Observed in the Northern Mackenzie River District, North-West Territories of Canada, with Remarks on Explorers and Explorations of the Far North", *Proceedings of the U.S. National Museum*, 28:673-764.

MacInnes, Tom (ed.)

1931 *Klengenberg of the Arctic*. London.

Mackenzie, Alexander

1803 *Voyages from Montreal on the River St. Laurence, Through the Continent of North America to the Frozen and Pacific Oceans in the Years 1789 and 1793*. New York.

Macpherson, A.H.

1953 "An Attempt to Circumnavigate Banks Island by Canoe in 1952", *Arctic Circular*, 6(3): 24-30.

Marshall, Robert

1934 *Arctic Village*. London.

Masik, August & Isobel Hutchinson

1935 *Arctic Nights' Entertainments*. London.

McEwen, E.H.

1953a *Report on Flight to Sachs Harbour, Banks Island, April 1953*. Canadian Wildlife Service, C.W.S.C. 29, Ottawa. Unpublished

1953b *Wildlife – Banks Island, April 10-11, 1952 and April 3-8, 1953*. Canadian Wildlife Service, C.W.S.C. 30, Ottawa. Unpublished.

1954 *Report on Flight to Sachs Harbour, Banks Island, March, 1954*. Canadian Wildlife Service, C.W.S.C. 27, Ottawa. Unpublished.

Murdoch, John

1892 *Ethnological Results of the Point Barrow Expedition*. Ninth Annual Report of the Bureau of Ethnology, 1887-88, Washington, D.C.

Northwest Territories

1967 "White Fox Subsidy", (Recommendation to Council), *Council Debates*, 34th Session, Vol. 3:129-132.

Parry, W.E.,

1821 *Journal of a Voyage for the Discovery of a North-West Passage*, London.

Petitot, Emile

1876 *Monographie des Esquimaux Tchiglit du Mackenzie et de l'Anderson*. Paris.

Polar Record

- 1936 "R.C.M.P. Patrol – Coppermine to Walker Bay and Richardson Island", 12:152-154.

Porsild, A.E.

- 1950 "A Biological Exploration of Banks and Victoria Islands", *Arctic*, 3(1): 45-54.

Pullen, W.J.S.

- 1947-48 "Pullen in search of Franklin", *Beaver*: Outfit 277:40-43, Outfit 278:22-25.

Rasmussen, K.

- 1942 *The Mackenzie Eskimos*. (H. Ostermann, ed.). Report of the Fifth Thule Expedition, 1921-24, 10(2). Copenhagen.
- 1952 *The Alaskan Eskimos*. (H. Ostermann, ed.). Report of the Fifth Thule Expedition, 1921-24, 10(3). Copenhagen.

Richardson, John

- 1851 *Arctic Searching Expedition*. London.

Simpson, John

- 1875 "Observations on the Western Eskimo and the Country They Inhabit", from "Notes Taken During Two Years at Point Barrow", *Further Papers Relative to the Recent Arctic Expeditions in Search of Sir John Franklin*. Parliamentary Report, 1885, reprinted as *Arctic Geography and Ethnology*, Royal Geographical Society, London, 1875:233-275.

Simpson, Thomas

- 1843 *Narrative of the Discoveries on the North Coast of America*. London.

Slobodin, R.

- 1962 *Band Organization of the Peel River Kutchin*. National Museum of Canada, Bulletin 179, Ottawa.
- 1966 *Metis of the Mackenzie District*. Ottawa

Spencer, R.F.

- 1959 *The North Alaskan Eskimo*. Bureau of American Ethnology, Bulletin 171, Washington, D.C.

Stefansson, V.

- 1909 "Northern Alaska in Winter", *Bulletin of the American Geographical Association*, 41:601-10.
- 1914 *Prehistoric and Present Commerce among the Arctic Coast Eskimo*. National Museum of Canada, Bulletin 6. Ottawa.
- 1923 *Hunters of the Great North*. London.

Stuck, Hudson

- 1920 *A Winter Circuit of our Arctic Coast*. New York.

Sutton, G.M.

- 1934 *Eskimo Year*. New York.

Tanner, Adrian

- 1966 *Trappers, Hunters and Fishermen*. Department of Northern Affairs and National Resources, Northern Co-ordination and Research Centre, YRP – 5, Ottawa.

Towers, Walter S.

- 1907 *A History of the American Whale Fishery*. Series in Political Economy and Public Law, no. 20, University of Pennsylvania, Philadelphia.

Tranter, G.J.

- 1945 *Plowing the Arctic*. Toronto.

Whittaker, C.E.

- 1937 *Arctic Eskimo*. London.

Zaslow, Morris

- 1948 *A History of Transportation and Development of the Mackenzie Basin from 1871 to 1921*. M.A. thesis in history, unpublished, University of Toronto, Toronto.

